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ABSTRACT

Objectives of the Veterans' Cost-of-Instruction Program (VCIP) evaluation were: (1) to develop profiles describing institutional services for veterans, the Office of Veterans' Affairs (OVA), and demographic characteristics; (2) to identify differences and similarities in institutions' veteran assistance programs; (3) to describe the degree to which institutions have met the major criteria; and (4) to develop a method for category and variable identification. A sample of 400 VCIP projects were evaluated using descriptive techniques. Content analysis and factor analysis reduced narrative responses to quantifiable data. Variables that best defined similarities and differences among VCIP projects and their host institutions were identified. Findings revealed that the average number of undergraduate veterans enrolled in the sample was 801. Cluster analysis identified twelve clusters of OVA programs and host institutions. Cluster characteristics indicated that programs vary as a function of the institutional context in which they operate, the number of veterans on campus, and the institution's academic climate. The data suggest that qualitative or stylistic differences in OVA program operations may be a function of the background, commitment, and particular skills of the OVA director/coordinator and staff. Ninety-five percent of the programs were found to meet staffing and services requirements; ninety-one percent were found to meet budgetary assignment requirements. (CSS)

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RESEARCH TRIANGLE INSTITUTE
CENTER FOR EDUCATIONAL RESEARCH AND EVALUATION
RESEARCH TRIANGLE PARK, NORTH CAROLINA 27709

FINAL REPORT

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EVALUATION OF THE VETERANS' COST-OF-INSTRUCTION PROGRAM

by

Arthur M. French
Edward J. Fuentes
Roderick A. Ironside
John A. Riccobono

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U.S. DEPARTMENT OF HEALTH,
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G. J. Burkheimer
J. A. Davis
G. H. Dunteman
A. M. French (Project Director)
E. J. Fuentes
R. A. Ironside
J. A. Riccobono
L. A. Ward
J. H. Weber
D. H. Whitehorne
J. M. Wisenbaker

PREFACE AND ACKNOWLEDGEMENTS

This document, Evaluation of the Veterans' Cost-of-Instruction Program, represents the final report of research conducted by the Research Triangle Institute (RTI) under U. S. Office of Education (USOE) contract number HEW-100-77-0081. The main body of the report, an executive summary, and supporting technical appendixes are bound in one volume.

The authors, in preparing this report, wish to express their special appreciation for the cooperation and contributions of a number of people both within and outside RTI.

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TABLE OF CONTENTS

Page

Preface and Acknowledgements iii

Table of Contents v

List of Tables ix

List of Figures xii

Executive Summary xiii

Chapter 1. Introduction

I. GENERAL 1.1

II. BACKGROUND 1.1

III. THE EVALUATION STUDY 1.4

  A. The VCIP Evaluation 1.4

  B. Evaluation Study Objectives 1.5

  C. Scope of the Evaluation 1.5

  D. A Guide to the Remainder of the Report 1.11

Chapter 2. Methodology

I. GENERAL 2.1

II. CONTENT ANALYSIS 2.2

  A. Category Identification 2.2

  B. Coders' Guide/Standardized Categorization Manual 2.3

  C. The Quantification Procedure 2.3

II. PROCESSING AND MANAGEMENT OF DATA 2.4

  A. General Processing 2.4

  B. Elimination of Institutions 2.4

  C. Preliminary Data Reduction 2.5

Table of Contents (continued) Page

IV. DATA QUALITY. 2.6

A. Data Indeterminacy 2.6

B. Data Reliability 2.7

V. APPROACHES TO ANALYSIS. 2.8

A. Factor Analysis. 2.8

B. Cluster Analysis 2.9

C. Profile Analysis 2.10

Chapter 3. Findings

I. GENERAL 3.1

II. CHARACTERISTICS OF THE INSTITUTIONAL CLUSTERS 3.1

A. Cluster A: The Small Student-Oriented Institutions. . . 3.4

B. Cluster B: The Little Academes. 3.4

C. Cluster C: The Basic Services OVA Institutions. 3.5

D. Cluster D: The Promotor OVA Institutions. 3.5

E. Cluster E: The Big Public Institutions. 3.5

F. Cluster F: The Management Oriented OVA Institutions . . 3.6

G. Cluster G: The Well-Developed OVA Institutions. 3.6

H. Cluster H: The Large OVA Public Institutions. 3.7

I. Cluster I: The Minimal OVA Service Institutions 3.8

J. Cluster J: The Minimal OVA Service Elites 3.8

K. Cluster K: The Public Service Institutions. 3.9

L. Cluster L: The Urban Community Colleges 3.9

III. CLUSTER PROFILE DIFFERENCES 3.10

A. Veteran Enrollment Patterns. 3.10

B. Expenditure Patterns 3.13

Table of Contents (continued) Page

C. Staffing Patterns. 3.16

D. Summary. 3.19

IV. THE EXTENT TO WHICH PROJECTS MEET BASIC VCIP REQUIREMENTS . . 3.19

A. Staffing 3.20

B. Percentage of VCIP Funds Used by the OVA 3.20

C. Required Services. 3.21

D. Summary. 3.22

V. TOWARD AN INSTITUTIONAL TYPOLOGY FOR OVA PROGRAM PURPOSES: CONJECTURES ON UNDERLYING FORCES FORMING THE CLUSTERS 3.23

Chapter 4. Summary and Conclusions

I. BACKGROUND, PURPOSE, AND METHODOLOGY. 4.1

A. Background 4.1

B. Purpose. 4.2

C. Methodology. 4.2

D. Constraints and Limitations. 4.3

II. OVERVIEW OF FINDINGS. 4.3

A. Characteristics of the OVA Programs. 4.3

B. Characteristics of the Institutional Clusters. 4.4

C. Cluster Profile Differences. 4.7

D. Extent to Which Projects Meet VCIP Basic Requirements. . 4.8

III. GENERAL CONCLUSIONS 4.9

A. Factors Affecting VCIP Project Operations. 4.9

B. Methodological Findings. 4.10

Appendix A. Composite Variable List and Data Source

Appendix B. USOE Forms

Appendix C. VCIP Data Processing Documentation

Table of Contents (continued)

Appendix D. Coder's Guide/Standardized Categorization Manual

Appendix E. Sampling Procedures

Appendix F. Data Management and Processing Procedures

Appendix G. Generalizability Analysis

Appendix H. Findings and Results

Bibliography

LIST OF TABLES

Table		Page
3.1	Cluster Profiles for Selected Variables	3.3
E.1	Enrollment Classes used in Stratification	E.2
E.2	Sample Sizes and Anticipated Sampling Error for a Percentage of 50% by Total, Type of Support, Type of Institution, Type of Grant, and Two Classes of Category I and Category II	E.9
E.3	Sample Sizes and Approximate Sampling Error for a Percentage of 50% for Each of the Ten USOE Regions	E.10
F.1	Factors Derived from Principal Axis Analysis of Institutional Demographic Characteristics Items	F.13
F.2	Factors Derived from Principal Axis Analysis of VCIP Resource Level Items	F.14
F.3	Factors Derived from Principal Axis Analysis of OVA Expenditures and Obligations Items	F.15
F.4	Factors Derived from Principal Axis Analysis of OVA Personal Services Offered Items	F.16
F.5	Factors Derived from Principal Axis Analysis of Outreach and Recruitment Items	F.18
F.6	Factors Derived from Principal Axis Analysis of Available Services Items	F.19
F.7	Factors Derived from Principal Axis Analysis of Professional Assistance Available Items	F.20
F.8	Factors Derived from Principal Axis Analysis of Problems and Resolutions Items	F.21
F.9	Factors Derived from Principal Axis Analysis of Coordinator's Qualifications and Responsibilities Items	F.22
F.10	Mean Factor Score Profiles for 12 VCIP Clusters	F.27
G.1	Typical ANOVA Table for the P x R x O Design	G.8
G.2	MANOVA Table for the P x R x O Design	G.9
G.3	Average Generalizability Coefficients for Easy-to-Rate and Hard-to-Rate Indicator Items and Characteristics	G.12

List of Tables (continued)

Table Page

G.4 Multivariate Generalizability Coefficients for Easy-to-Rate and Hard-to-Rate Indicator Items and Characteristics. G.13

G.5 Univariate Variance Component Estimates for All Variables . . G.16

G.6 Number of Raters Required for .80 Reliability and Univariate G Coefficient Estimates G.21

G.7 Sums of Squares and Cross Products Due to Various Sources for 5 Easy Categories G.25

G.8 Estimated Variance-Covariance Components for 5 Easy Categories. G.27

G.9 Sums of Squares and Cross Products Due to Various Sources for 5 Hard Categories G.28

G.10 Estimated Variance-Covariance Components for 5 Hard Categories. G.30

G.11 Sums of Squares and Cross Products Due to Various Sources for 10 Easy Indicator Items G.31

G.12 Estimated Variance-Covariance Components for 10 Easy Indicator Items G.35

G.13 Sums of Squares and Cross Products Due to Various Sources for 10 Hard Indicator Items G.37

G.14 Estimated Variance-Covariance Components for 10 Hard Indicator Items G.41

H.1 Percentage of Institutional Characteristics by Cluster. . . . H.2

H.2 Percentage of VCIP Resource Level by Cluster. H.4

H.3 Percentage of OVA Expenditures and Obligations by Cluster . . H.6

H.4 Percentage of OVA Personal Services Offered by Cluster. . . . H.9

H.5 Percentage of Outreach and Recruitment Services by Cluster. . H.14

H.6 Percentage of Available Services by Cluster H.16

H.7 Percentage of Professional Assistance Available by Cluster. . H.17

H.8 Percentage of Problems and Resolutions by Cluster H.18

H.9 Percentage of Qualifications and Responsibilities by Cluster. H.19

H.10 Standardized Factor Means by Cluster. H.21

List of Tables (continued)

Table Page

H.11 Variable Means for All Institutions (Zero Values Are Included) H.27

H.12 Variable Means for All Institutions (Zero Values Are Not Included) H.28

H.13 Variable Means by Cluster H.29

H.14 Mean Number of Category I Veterans in April 1975, October 1975, and February 1976 . . . . H.35

H.15 Mean Number of Category II Veterans in April 1975, October 1975, and February 1976 . . . . H.36

H.16 Mean VCIP Funds for Expenditures and Obligations. H.37

H.17 Mean Non-VCIP Funds for Expenditures and Obligations. H.38

H.18 Mean Total Funds for OVA Personal Services. H.39

H.19 Mean Full-Time-Equivalent Persons Staffing OVA Personal Services. H.40

H.20 Multivariate Profile Analysis Tests for Enrollment Patterns . H.41

H.21 Multivariate Profile Analysis Tests for Expenditure Patterns. H.42

H.22 Multivariate Profile Analysis Tests for Staffing Patterns . . H.43

H.23 Large Institutions Reporting Less Than One Full-Time Person to Staff the OVA. H.44

H.24 Small Institutions Reporting Less Than One Full-Time-Equivalent Person to Staff the OVA. H.45

H.25 Institutions Reporting Less Than 75 Percent of the VCIP Award Used for OVA Expenditures and Obligations H.46

H.26 Institutions Not Reporting Required Services. H.47

LIST OF FIGURES

Figure	Page
3.1 Mean Number of Category I Veterans Enrolled in April 1975, October 1975, and February 1976	3.11
3.2 Mean Number of Category II Veterans Enrolled in April 1975, October 1975, and February 1976	3.12
3.3 Mean VCIP Funds for OVA Expenditures and Obligations	3.14
3.4 Mean Non-VCIP Funds for OVA Expenditures and Obligations	3.15
3.5 Mean Full-Time-Equivalent Persons Staffing OVA Personnel Services	3.17
3.6 Mean Total Funds for OVA Personnel Services	3.18
E.1 Ordering Procedure for Sampling	E.4
F.1 Steps in Constructing the VCIP Data Files	F.2
G.1 Schematic Representation of the Variance Components for the VCIP Generalizability Study	G.5

Executive Summary

Evaluation of the Veterans' Cost-of-Instruction Program

I. BACKGROUND

The Veteran's Cost-of-Instruction Program, (VCIP) is directed by the U.S. Office of Education (USOE) and is intended to provide improved and expanded postsecondary education services to veterans (Title X, Section 420, P.L. 92-318, as amended by P.L. 93-380). Postsecondary institutions accepting a VCIP award are committed to spend at least 75 percent of the award funds to: (1) establish a full-time Office of Veterans Affairs (OVA) that is adequate, accessible, and visible; (2) employ at least one full-time staff member whose only institutional responsibility is to veterans; and (3) provide services in recruitment, counseling, special education programs, and "outreach". The Veterans' Program Branch of USOE provides the VCIP awards to the institution on the basis of the number of full-time-equivalent undergraduate veterans enrolled receiving vocational-rehabilitation or general educational assistance benefits.

For program year 1975-76, 1,206 institutions were funded by the VCIP. The total dollar appropriation for the year was $31,250,000 for a total formula request of $264,388,312. A total of 845,642 full-time-equivalent Category I veterans (those veterans who are receiving benefits under Chapter 31 and Chapter 34, Title 38, United States Code) and 71,304 full-time-equivalent Category II veterans (those veterans who are currently receiving or have received benefits for tutorial assistance under Sub-chapter V of Chapter 34, Section 1692, and those individuals who have received benefits under Sub-chapter V and VI of Chapter 34, Sections 1691 and 1696, Title 38, United States Code) were reported for VCIP award calculations. For qualification and award purposes, institutions report only those veterans who are enrolled at least half-time and who are receiving vocational education or general educational assistance benefits, even though the OVAs offer services to all veterans.

In June 1977, USOE contracted with the Research Triangle Institute to evaluate the VCIP (contract No. HEW-100-77-0081). Objectives of the evaluation were: (1) to develop profiles describing institutional services for veterans, the Office of Veterans' Affairs, and demographic characteristics; (2) to identify differences and similarities in institutions' veteran assistance programs; (3) to describe the degree to which institutions have met the major criteria listed in the regulations; and (4) to develop a standardized method for category and variable identification from narrative Program Operations Reports.

II. METHODOLOGY

A sample of 400 VCIP projects funded in academic year 1975-76 were selected using a systematic stratified selection procedure. The raw data to be examined were obtained from four USOE forms. The forms consisted of objective and subjective program descriptive information and provided an existing data base along with the USOE Student Financial Aid Master File.

The major thrust of the evaluation was descriptive and focused on the VCIP projects as the unit of analysis. Interest was directed toward the commonalities and diversities existing among VCIP operations, either globally or in relation to stated program criteria. It should be recognized that the existing data were not collected with detailed description or rigorous evaluation in mind. Because a substantial portion of the data was obtained from paragraph narratives and because the information on the USOE forms reflected primarily funding data, most of the questions related to the VCIP Regulation criteria were never addressed comprehensively.

Several different strategies were used in analysis. First a content analysis was undertaken to reduce narrative responses to quantifiable data. Second, the variables selected from VCIP project records maintained by the USOE Veterans' Program Branch were reduced to aggregate or composite variables. Next, factor analytic techniques were employed to further reduce the data elements. Although some quality problems were detected in the existing objective information, such problems were considered to be within acceptable tolerance levels. On the other hand, the reliability of the data abstracted from paragraph narratives was only marginal to submarginal, and the quality of this data is suspect.

Subsequent analysis activities were directed to the identification of those variables that best defined similarities and differences among the VCIP projects and their host institutions. A cluster analysis procedure isolated different groups or types of VCIP projects/institutions. Profile analyses were then conducted to examine differences in program relevant variables between these clusters.

III. FINDINGS AND CONCLUSIONS

A. Vital Statistics of the OVA Programs

Undergraduate veteran enrollment varied greatly among the sample VCIP projects. The mean number of undergraduate veterans enrolled in the sample was 801 students, but varied from 27 to 5380 veterans. The number of Category I veterans enrolled ranged from 16 to 3924 students, and the number of Category II veterans ranged from zero to 1389 students enrolled. The number of Category I and Category II veterans generally increased between April 1975 and February 1976.

Available funds and expenditures also varied substantially among VCIP projects. Total VCIP awards ranged from $4106 to $135,000. Reported institutional funds ranged from zero to $125,775. The average VCIP expenditure for staff salaries was $16,960, but ranged from less than $500 through more than $114,000. Similarly, the average non-VCIP funds invested in staff salaries was $7252, but ranged from less than $100 through more than $95,000. This extreme range of funds was observed for other OVA expenditures and obligations as well. The average VCIP indirect expenditures for OVA staff was $4989, and ranged from less than $50 through more than $44,500. Non-VCIP funds for indirect service expenses varied even more from less than $50 through almost $71,000, and an average of $2670. The relationship of VCIP to non-VCIP funds appears to be more a matter of institutional preference and action or of reporting habits than of the amount of funds awarded or provided.

Staffing differences parallel the differences in total funds available, as expected, and show a similarly wide variation. The distribution of staff by function also varied considerably, particularly in the proportion of total staff devoted to counselors, outreach workers, coordinators, and secretarial support. For example, although the mean number of full-time-equivalent (FTE) counselors was slightly less than one half-time person, some projects reported as many as 6.75 FTE counselors.

B. Dimensions of OVA Functioning as Revealed by the Clustering of Programs

Twelve separate clusters of OVA programs (and host institutions) were clearly identified. These clusters may be described as follows:

Cluster A: The Small Student-Oriented Institutions. OVA activities in these 56 institutions appear to be shaped substantially by the extant small institution climate and the natural emphasis in this environment for effective teaching. Academic problems of veterans are served by learning laboratories or curricular devices in the college, rather than by such general support mechanisms as counseling or tutoring in the OVA services. Management-coordination-liaison functions appear minimal, with OVA energies directed toward providing personalized services to the student as an individual, and toward mobilizing other regular college services to work for him.

Cluster B: The Little Academes. Although this cluster of 23 institutions, like Cluster A, contains essentially small institutions serving lower numbers of veterans, the host institutions are distinguished by high-cost and apparently more traditional academic programs. Their OVA offices have a business-like atmosphere, and focus on resolving personal, financial, and career problems. Remediation, as a general or specific instructional support, is either not needed or perceived as generally inappropriate.

Cluster C: The Basic Services OVA Institutions. While representing the range of institutions in size, these 70 colleges and universities also serve relatively small numbers of veterans, and invest minimal funds of their own (as opposed to VCIP funds) in OVA affairs. Outreach and recruitment activities are limited; OVA staff spend significant time interacting with the VA, and in counseling students on personal and academic (not job or career) problems. OVAs appear to be imposed or adjunct, rather than integral and mainstream, activities in the total institutional climates.

Cluster D: The Promotor OVA Institutions. This cluster of 43 institutions is distinguished by high emphasis on recruiting, outreach, and basic services activities. Academic support is marked by specific tutoring rather than general counseling support. The OVA offices here (1) bring in the veterans, (2) see that they have specific instructional support in particular subject matter areas, and (3) spend much time interacting with the VA on their behalf.

Cluster E: The Big Public Institutions. This cluster of 15 institutions appears to be distinguished first by institutional factors (e.g., there is a majority of large public universities, and a minority of large public community colleges), than by some distinct OVA functioning factors.

OVA activities are well supported by VCIP and institutional funds. Staff devote significant time to basic OVA and general remedial services, and to personal, academic, and vocational counseling; mass recruiting approaches are employed. The data suggest that the institutions are too large and complex to coordinate service activities; OVA offices have the critical mass of staff to provide self-contained and specialized services to veterans, though with more emphasis on the programs for individuals than on individuals.

Cluster F: The Management Oriented OVA Institutions. This cluster of 38 institutions is distinguished by management and administration oriented OVA offices serving large numbers of veterans on mid-size (2500 to 8000 students) public campuses, the majority of which are 2-year colleges. Interaction with other campus support services tends to be high, as is emphasis on recruiting. Personal, academic, and vocational counseling functions are also stressed.

Cluster G: The Well-Developed OVA Institutions. A small cluster of 9 institutions with heavier representation of 4-year colleges than the other clusters, this group is distinguished by well-developed OVA programs, with more than modal emphasis on a host of OVA functions: development of special education programs, counseling, recruitment. Staffing is relatively large, and staff functions are highly specialized; the institutional environments appear cordial and supportive.

Cluster H: The Large OVA Public Institutions. Although all but one of the 30 institutions in this cluster are publicly controlled, the unique aspects appear to be more in terms of style of OVA functioning. Relatively large staffs serve relatively small numbers of veterans, with an emphasis on general counseling and general management of veterans' affairs, rather than well-developed and highly specific services.

Cluster I: The Minimal OVA Service Institutions. This cluster of 63 institutions, the largest among the clusters and with the heaviest proportion (25%) of privately controlled colleges, is distinguished from the others principally in terms of OVA programs about which not much could be said or was said concerning particular programatic emphases. Funding levels, from Federal and institutional sources, are modest, as are the numbers of veterans served.

Cluster J: The Minimal OVA Service Elites. This cluster of 21 institutions appears to be unique among the other clusters both in terms of little said or to be said about OVA functioning, and in terms of the institutional climate, featuring heavier proportions of private and/or high instructional cost colleges and universities.

Cluster K: The Public Service Institutions. A small cluster (9 institutions) of large but low cost institutions, this group appears to stand out from the others in that both the institutions and their well-staffed OVA programs serve to place prime emphasis on serving the general public's needs and interests. OVA basic services, particularly the more programatic ones (remediation, financial assistance, career decisions) are stressed.

Cluster L: The Urban Community Colleges. All but one of this cluster of 13 large public institutions are two-year colleges. OVA and other institutional emphases are on recruitment, remediation, and service, and on the management and liaison activities useful in integrating similar values reflected by the instructional programs and the typical OVA functions.

From the characteristics of these clusters, it may be concluded that programs may vary, first, as a function of the particular institutional context in which they operate; yet, these contexts are only partially described by such categories as level of academic offering, control, or size. More important may be such related matters as the numbers of veterans available on the campus to be served (which drives the mass of staff and services that can be supported), or the academic climate of the institution (which drives the need for and acceptability of instructional support services). Recruiting, a basic and integral part of the VCIP program, is justifiable in its own right as a program function, but the data suggest strongly that some institutions (the community colleges, for example) have an easier outreach proposition since their target area is well-defined and within commuting distance and since their traditional service population is similar to a large proportion of veterans on a number of academically relevant variables (e.g., scholastic ability, vocational/curricular aspiration, etc.). Financial counseling can assume major importance for high cost institutions that accept or attract veterans from other than moderately affluent backgrounds. Institutions that provide no remedial services but have veterans needing such services place a greater remedial burden on the OVA to provide this necessary support.

Beyond these institutional factors, however, the data strongly suggest that sharp qualitative or stylistic differences in OVA program operation exist that may be a function of the background, committment, and particular skills of the OVA director or coordinator and the OVA staff. Some programs appear only to exist and be available for whoever might walk through the office door, while others appear to strive toward creative, energetic, and interactive provision of what veterans on the campus may need. Stated another way, there is the suggestion in the data that some OVAs passively or routinely offer the required services, while others actively and energetically provide these services and whatever else may be needed by veterans in that context. The data sources employed, however, would need to be better structured and sharpened to serve as a basis for any substantative qualitative evaluation of the impact and consequences of the OVA programs.

C. Evidence that Programs Meet VCIP Basic Requirements

Three major VCIP program requirements concern (1) the employment of at least one full-time OVA coordinator dedicated to veterans' services, (2) the assignment of at least 75 percent of funds awarded to specifically required services, and (3) the provision of particular services (recruitment and outreach, counseling, and special education programs). The evidence assembled on these matters appears straightforward: 95 percent of the sample of OVA programs examined reported meeting the staffing and services requirement, and 91 percent reported meeting the budgetary assignment requirement. The program track record in this regard would seem to be relatively good, considering the intended usage of the available data.

Chapter 1

Introduction

I. GENERAL

This document constitutes the final report of an evaluation study of the Veterans' Cost-of-Instruction Program (VCIP). The VCIP is directed by the U.S. Office of Education (USOE) and is intended to provide improved and expanded postsecondary education services to veterans. The study, conducted by the Research Triangle Institute (RTI), was supported by the Office of Planning, Budgeting, and Evaluation (OPBE) of USOE (contract number HEW-100-77-0081).

This report describes the study and study results; however, the critical reader should refer to cited appendixes or references to obtain details that, for purposes of brevity and readability, were not included in the text. This introductory chapter briefly describes background material relevant to the VCIP, the VCIP evaluation study objectives, an overview of the scope of the evaluation effort including constraints and limitations, and the organization of the remainder of the report.

II. BACKGROUND[1]

The VCIP is directed by USOE and is intended to provide improved and expanded postsecondary education services to veterans (Title X, Section 420, P.L. 92-318, as amended by P.L. 93-380). Postsecondary institutions accepting a VCIP award are committed to spend at least 75 percent of the award funds to: (1) establish a full-time Office of Veterans Affairs (OVA) that is adequate, accessible, and visible; (2) employ at least one full-time staff member whose only institutional responsibility is to veterans; and (3) provide services in the areas of recruitment, counseling, special education programs and "outreach".

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[1] The section on Background was derived in part from a comprehensive operational summary of the VCIP provided by the Veterans' Program Branch of the U.S. Office of Education, Department of Health, Education, and Welfare.

The Veterans' Program Branch (VPB) provides the VCIP award to the institution not as a grant or a contract, but as an entitlement or award of institutional aid. The award is calculated on the basis of the number of full-time-equivalent undergraduate veterans enrolled receiving vocational-rehabilitation or general educational assistance benefits, and makes no provisions for administrative or indirect costs. All funds received by an institution are used for direct services.

Program Regulations[2] specify the manner in which funds are to be expended, and distinguish between funds for providing veterans services under the Office of Veterans' Affairs, and those funds that may be used for instructional expenses in academically related programs. OVA expenses (not less than 75 percent of the VCIP funds) are to be used to provide mandated services to veterans. After the required services have been provided, remaining funds may be designated as the "institutional share" of the award. These general expenditures for instructional/academic services may include instructional salaries, instructional materials, media equipment, and library materials.

Required services in "outreach" refer to a program of reaching and contacting veterans, assessing veterans needs, problems, and interests, and coordinating referral services in areas such as housing, employment, health, recreation, vocational and technical training, and financial assistance. Recruitment activities involve an effort to interest veterans in taking advantage of a wide variety of postsecondary opportunities, and to bring to the institution a maximum number of veteran students. Special education programs are programs which provide remedial, motivational, and tutorial services for the veteran, and procedures that will accommodate the special needs and problems of the veteran student in order to provide adequate guidance for the individual veteran. Counseling services refer to the availability of professional assistance with personal, family, educational, and career problems, and to scheduled liaison between the OVA and the institution's academic departments or counseling service.

Institutions identified in the legislation as small institutions (those schools with less than 2,500 students and no more than 70 veterans) are required to establish a full-time OVA and to provide recruitment and counseling services for the veteran. Larger institutions (those enrolling more than 2,500 students and/or more than 70 veterans) must additionally provide remediation opportunities, tutorial services, and outreach activities. Small institutions have the option of forming a Consortium with other small institutions in close proximity, as long as the required services are made available to all veterans on the combined campuses. Small institutions may also employ part-time employees, who together meet the responsibilities of a full-time-equivalent OVA coordinator.

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[2] VCIP Regulations were published in the Federal Register, Volume 40, Number 104, on May 29, 1975.

For program year 1975-76, 1,206 institutions were funded by the VCIP. The total dollar appropriation for the year was $31,250,000 for a total formula request of $264,388,312.50 (an approximate prorated funding percentage of 11%).[3] A total of 845,642.25 full-time-equivalent Category I veterans and 71,304.25 full-time-equivalent Category II veterans,[4] were reported for VCIP award calculations. For qualification and award purposes, institutions report only those veterans who are enrolled at least half-time and who are receiving vocational educational or general educational assistance benefits, even though the OVAs offer services to all veterans.

Approximately $10 million was awarded to 416 four year institutions while approximately $20 million was awarded to 722 two year educational institutions. The 942 public institutions received close to $27 million, while the private institutions received about $3 million in funds.[5] Total net awards amounted to between $5,000 and $25,000 for 820 of the 1,206 institutions funded during 1975-76. Larger awards varied from between $25,000 and more than $100,000 for the remaining 386 funded institutions.

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[3] Summary information is based upon the Funding Summary for the Veterans' Cost-of-Instruction Program and Appendices to the Report on the Veterans' Cost-of-Instruction Program Descriptive and Summary Analyses.

[4] Those veterans who are receiving benefits under Chapter 31 (vocational rehabilitation assistance) and Chapter 34 (general education assistance), Title 38, United States Code, are considered Category I veterans. Category II veterans are those who are currently receiving or have received benefits for tutorial assistance under Sub-chapter V of Chapter 34, Section 1692, and those individuals who have received benefits under Sub-chapter V and VI of Chpater 34, Sections 1691 and 1696, Title 38, United States Code.

[5] The approximations are based upon three descriptive variables employed to summarize VCIP institutional awards in the VCIP appendices: 1) AWARD, the dollar amount initially awarded to an institution; 2) NET, the dollar amount awarded to an institution following reallocation adjustments; and 3) ELIG, the dollar amount an institution is eligible to receive, if fully funded, based upon $300 per Category I plus $150 per Category II veteran. Sixty-eight institutions were not classified in the VCIP Summary Report in terms of control or highest offering.

Due to the fact that institutions received only about 11% of funds requested, many institutions were operating the VCIP under financial constraints. Because of this, the Veterans Program Branch of USOE suggested the use of supplemental sources of funds such as the Veterans Administration (VA) Work Study, College Work-Study funds, and funds provided by the Comprehensive Employment and Training Act (CETA) of 1973 for extending program services. The utilization of veterans in tutorial programs, and use of the VA reporting fee were other suggestions made by the VPB for institutions considering the improvement of their services to veterans.

Four USOE forms (defined in section III.A below) are used to collect data and to control the eligibility and activities of institutions under the provisions and required services set forth in the VCIP Regulations. Regional Veterans' Coordinators have responsibility for technical assistance to and monitoring of the VCIP and for assessing the adequacy of VCIP as stated in Section 189.16 of the Regulations.

III. THE EVALUATION STUDY

A. The VCIP Evaluation

The VCIP evaluation involved assembling program information from existing USOE documents, and obtaining a VCIP system tape containing fiscal information as well as additional institutional data that had been compiled and transcribed to the existing tape. Data for analysis were limited to those previously collected for the academic year 1975-76. This period falls after the May 1975 publication of regulations establishing criteria for assessing the adequacy of veterans' programs, and for the most part precedes the marked downward adjustment of institutional allocations that resulted from the expiration of post-Korean veterans' benefits in May 1976. These data were available on USOE Forms 269 (Application Data), 269-1 (Fiscal Operations Report), 269-2 (Program Operations Report), and 269-3 (Veteran Student Enrollment Verification). These forms are reproduced in Appendix B for reference. Only Form 269-1 existed on magnetic tape along with additional institutional data obtained from the USOE Student Financial Aid Master File. A description of this tape, specifying the available data is provided as Appendix C to this document. The information available from USOE Forms 269, 269-1, and 269-3 were basically objective items relating to dollar amounts and staff or student counts. The information available from OE Form 269-2, however, was considerably more subjective; entries on that form consisted of program descriptive information provided in paragraph narratives. To obtain information from the form, a content analysis was conducted and, on the basis of the content analysis, a standard coding guide was developed. A copy of the coding guide is included as Appendix D to this document.

A sample of 400 of the 1,206 VCIP projects existing in academic year 1975-76 were selected, using a systematic stratified selection procedure. The sampling plan that was employed is described in detail in Appendix E. In general, the plan controlled important stratification variables--institutional control (public-private), USOE region, institutional level of offering, type of award (initial or renewal), and numbers of veterans enrolled by veteran type (Category I and Category II as defined in Section II).

B. Evaluation Study Objectives

The five study objectives were as follows:

1) To develop profiles that describe institutions in terms of the coordination of services for veterans, the Office of Veterans' Affairs (including expenditures, staffing patterns, hiring practices and function) and demographic characteristics.
2) To identify the differences and similarities in institutions' veteran assistance programs.
3) To develop a plan for ongoing data collection and interpretation.
4) To describe the degree to which institutions have met the criteria listed in the regulations.
5) To identify the relationships among institutional characteristics, expenditures and staffing patterns of institutional Offices of Veteran's Affairs, and the degree to which institutions have met the criteria listed in the regulations.

It should be recognized that these objectives were necessarily quite general in scope and did not define a unique approach with which to address the objectives.

C. Scope of the Evaluation

As implied by the study objectives, the major thrust of the evaluation was descriptive and focused on the VCIP projects as the unit of analysis.

Questions of interest involved the commonalities and diversities existing among VCIP operations, either globally or in relation to stated program criteria and other institutional characteristics of interest. The nature of the existing projects and the relationships of project characteristics to one another and to other institutional characteristics were also a concern of the study.

1. General Constraints

A major determinant of the utility and generalizability of conclusions is the availability and quality of the data. Relevant data must be available if particular study objectives are to be addressed. The extent to which the existing open-ended data could be quantified to provide relevant information and the reliability of that data were of particular concern.[6]

Information contained on the USOE forms reflects primarily VCIP funding data and may not consider veterans activities prior to the VCIP award. In cases where VCIP funds were used to supplement previous activities, the data from USOE forms would not provide a comprehensive picture of all activities and services available for veterans.

The open-ended format of OE Form 269-2 precluded control over the inclusion of specific variables or over the respondents' interpretation of what constituted the specific information desired.[7] The items on the USOE forms did not specifically elicit information related to all the VCIP Regulation criteria, and the existing information could not be used to determine the extent to which institutions met all Regulations. Information was available concerning three major VCIP objectives as required by the Regulations: (1) to employ as OVA coordinator at least one full-time staff member whose service is to veterans; (2) to insure that not less than 75 percent of VCIP funds awarded shall be used by the OVA to implement required services; and (3) to provide required services to veterans in recruitment, counseling, special education, and outreach.

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[6] Other problems, imposed additional limitations. For example, there existed no check of validity of the data. There was no comparison between institutions participating in the VCIP and those not participating. The institutions funded by the VCIP may not be representative of the universe of postsecondary institutions that enroll veterans. The pattern of participating institutions and the services offered by those institutions may have differed had the program been fully funded instead of having appropriations at only a small fraction of the authorized level. "Add on" data bases such as VA files or institutional characteristics files might have thrown considerable light on these and other problems but were deemed beyond the scope of this evaluation.

[7] There is also some question as to what "non-availability" of information meant. If information was not reported, the institution may truly have nothing to report, or the instructions may not have been sufficiently clear to elicit the information, or other information provided may have been considered more important by the respondent.

Certain consistency checks of data from the various USOE forms and from the VCIP tape were performed. Moreover, the potential source of unreliability introduced in the process of extracting data from the paragraph narratives of OE Form 269-2 were addressed in a Generalizability Study. Procedures for these examinations of data reliability are outlined in Chapter 2 and detailed in Appendix G.

2. Specific Limitations of Analysis

a. Objective One

The first objective was examined in terms of specific questions appropriate for the available data. A substantial portion of the data was obtained from the open-ended paragraph narratives of OE Form 269-2, however, most of the questions pertinent to the construction of profiles were never posed directly to the institution or OVA. A summary statement of the OVA's accomplishments, and/or a description of the special education and counseling programs or activities, does not necessarily answer the question "What services are available for veterans?" or "What is the function of the OVA?", yet this was the only source of information about these questions. Since the data were not constructed to answer such specific questions, a specific answer did not exist in the data. In addition, it was not possible to clearly determine the separation of OVA programs and institutional programs, or to be sure that every available program was included in response to any item, since the instructions directed the institution to "discuss" the legislatively required services rather than to identify and describe all of the services available to the veteran.

The description of the OVA in terms of expenditures, staffing patterns, hiring practices and function was also constrained by the existing data available for analysis. Expenditures include only those items from the Fiscal Operations Report (OE Form 269-1) reported by the institution. Information relating to staffing patterns was restricted to the number of full-time-equivalent personnel reported in various OVA positions that were on salary. Hiring practices could only be described in an extremely limited sense; only the qualifications of the OVA coordinator were available to describe the hiring practices of the OVA (and even this information was not directly requested). The function of the OVA was almost impossible to determine from extant data. Although none of the OVA descriptors were very clearly requested from the institutions, the function of the OVA was in no way or in any place required, sought after, or even implied on the USOE forms. Function could only be addressed by searching available responses for indications of important features to the OVA, or by indications of the existance of OVA services to veterans in response to other questions.

b. Objective Two

The identification of differences and similarities in institutions' VCIP-funded projects was a natural by-product of a description of the projects. The institutions' veteran assistance programs were described by the institutional characteristics identified in Objective One. Implications for this objective were, therefore, identical to those discussed in the previous subsection.

c. Objective Three

Several limitations inherent in the preceding sections indicate the considerable dependence of the evaluation effort on the data obtained from the open-ended Program Operations Report (POR) items. It was not feasible to develop or establish a plan for ongoing data collection since (1) it was not within the scope of the evaluation to change the format, items, or directions of the POR and (2) respondents were not required to submit complete and accurate reports on the existing form. Any effective plan for gathering useful and interpretable data on VCIP services and accomplishments would require a revision of the USOE form in terms of more objective formats, altered tone in directions, greater structuring of the paragraph responses, etc., and a mechanism for assuring the submission of complete reports by grantees.

Beyond the nature of the open-ended items themselves (what the items asked for, the amount of item coverage, or the particular directions, as opposed to the actual material the items elicited), the data provided by respondents were frequently ambiguous or overlapping. For example, often there existed duplicated counts of the numbers of veterans served and in certain instances accounting was provided for some stated period of less than a full program year. A notable amount of overlap was apparent in the definition (and therefore reporting) of outreach and recruitment activities, and to some extent for special education and counseling. Many respondents combined their descriptions of these services. A given service could be provided by the OVA alone, by the institution, by outside agencies, via separate VA sections, or any combination of these--and frequently it was not clear which was the case. Moreover, it was not always clear whether a service was simply available, had actually been provided in the appropriate period, or was under discussion.

These examples suffice to indicate the difficulty in reducing the POR data and to suggest the futility of attempting to perfect a plan for ongoing data collection and interpretation given the existing form. These and similar issues were addressed in the Coding Manual, where every effort was made to anticipate such matters and devise ways to encode the reported data, but nonetheless could not affect or correct the information reported on the POR. At the same time, it should be noted that paragraph material from open-ended items can be reduced and coded; the argument is not with open-ended items per se, but rather with the particular open-ended items whose coverage and directions elicit mostly unusable or uncodable material. Any coding manual is tied to the constraints imposed by the instrument used to gather data. Thus, while a manual was developed and followed, it was not possible to second-guess respondents as to their intentions in describing the VCIP services or in accounting for their activities.

Appendix D includes a section outlining suggested changes in the Manual, the training procedure, and the content entries in the coding guide.

d. Objective Four

The data did not support the task of addressing objective four as stated. The data from USOE forms did not provide sufficient information to fully address even three of the sixteen criteria listed in the regulations.

Three problems existed that contributed to the infeasibility of meeting objective four. First, comprehensive study of the Program Operations Reports (OE Form 269-2) suggested that the responding institutions varied greatly in their interpretation of the items on that form. Different kinds of information were presented in different ways for any particular item. Comprehensiveness of the data was as variable as the different approaches to describing the particular item.

Second, the regulatory criteria deal with specific items that were not requested on the USOE forms in the same manner as they appear in the regulations (and in some cases were not requested at all). Respondents failed to provide specific data needed to evaluate regulation criteria, not because they didn't discuss the required services, but because they were not requested to relate each response to the Regulations.[8]

The third problem involves the wording of the criteria. The terms used, such as "coordinated and extensive", "maximum number of veterans", "sufficient number of qualified staff", "purposeful systematic programs", "most suited to their educational and career aspirations", "appropriate consideration", etc., do not lend themselves to operationalization or evaluation.

Nonetheless, to the extent possible, the degree to which institutions reported following regulatory guidelines was addressed in the analyses. Specifically, it is considered feasible to consider the requirements listed below.

i) Except as provided in Section 189.14 of the Regulatons (Institutions with small numbers of students and veterans), the OVA was to be staffed by at least one full-time employee whose sole institutional responsibility was that of maintaining and coordinating the activities of the OVA. Small institutions could employ part-time employees for this purpose who together assume the responsibility of a full-time-equivalent employee.

ii) Outreach activities existed.

iii) Recruitment activities existed.

iv) Special education programs were available.

v) Counseling was available.

vi) The expenditure requirements (Section 189.17 of the Regulations) states that not less than 75 percent of funds awarded to an institution shall be used by the institution to implement the above services. The remaining awarded funds may be used solely to defray instructional expenses in academically related programs.

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[8] For example, one criterion calls for "the establishment of an advisory mechanism involving community and institutional personnel to assist in the institution's decision-making process with respect to veterans' services and through which the institution may become aware of the views of the institution's administrative and academic staff, its veteran student population, and relevant community organizations." This is a complex criterion, which, although it may be met by the institution, appears nowhere on any of the USOE forms available for this study. Another criterion deals with outreach, and calls for "the establishment and maintenance of a coordinated and extensive referral service involving agencies providing assistance in areas such as housing, employment, health, recreation, vocational and technical training, and financial assistance." The criterion does not request the same information asked for in item 12.A of OE Form 269-2 which deals with outreach: "Describe the procedures used to assess the needs, problems, and interests of all veterans in the institutions normal service area and specify the total number of veterans contacted during the 1975-76 academic year."

e. Objective Five

Objective five sought to relate institutional characteristics and characteristics of the OVA to the degree to which institutions meet the regulatory criteria. Without sufficient data to describe the degree to which institutions meet the criteria in the regulations (objective 4), it was clearly not feasible to identify relationships among institutions (objective 5).

D. A Guide to the Remainder of the Report

Since selective readers may desire to concentrate on particular areas of interest, this section provides a convenient reference for locating specific topics in the subsequent portions of this report.

Chapter 2 presents a description of the methodology of the VCIP study. Included are discussions of the basic study procedures, the data base, data processing, and general analysis considerations. In addition, constraints and limitations of the methodology in addressing the specific analysis questions are documented. Results are presented in Chapter 3. The mode of data presentation is graphic and tabular in nature, with complete tabular presentations addressing all analysis questions provided in technical appendixes. A summary of the findings, limitations, and conclusions is presented in Chapter 4.

Technical appendixes provide considerably greater detail regarding aspects of the VCIP evaluation. Appendix A deals with the data elements. Appendix B provides copies of various federal forms from which data have been extracted. Appendix C documents the VCIP data tape provided by USOE. Appendix D provides a copy of the Coder's Guide, developed by RTI, for abstracting information from institutional responses to OE Form 269-2. Appendix E provides a description of the evaluation sampling procedures. Appendix F describes in greater detail the procedures and methodology of the VCIP study and includes a system file codebook of all variables used in the study. Appendix G details the examination of content data reliability by a generalizability analysis. Appendix H provides a complete tabular presentation of the VCIP study findings.

Chapter 2

Methodology

I. GENERAL

A sample of 400 institutions were selected from the 1,206 institutions with VCIP projects in academic year 1975-76. A systematic stratified selection procedure was used; this procedure produced approximately equal sampling probabilities while providing control for important stratification variables--institutional control (public or private), USOE region, institutional level of offering, status of award (initial or renewal), and number of veterans enrolled by veteran type (Category I or Category II, as defined in Chapter 1, Section II). Sampled institutions with extensive missing or unusable information were identified and replaced in the sample by institutions from the same sampling stratum. Details of the various sampling procedures are provided in Appendix E.

Each institution was characterized by a large number of data elements. Sources of data were: (1) a VCIP computer tape containing information from OE Form 269-1 and from the USOE Student Financial Aid Master File (see Appendix C for the VCIP Data Processing Documentation), (2) information extracted directly from other existing USOE forms (USOE Forms 269 and 269-3), and (3) quantifications of paragraph narratives provided on Program Operations Reports (OE Form 269-2).[9] Many of the variables were binary in nature, indicating the presence or absence of a service or program function. The second most frequent type of variable reflected counts of staff and students or various expenditures.

The basic design of the evaluation study was constrained by the extant data. The data had been collected to regulate Federal payments to institutions providing required veteran services but not necessarily to support evaluative analyses (see Chapter 1, Section III). Within these constraints, the study was designed primarily to address questions regarding the similarities and differences in institutions' veteran assistance programs and to develop profiles describing institutions in terms of important evaluative variables (services available, OVA expenditures, staffing patterns, institutional demographic characteristics).

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[9] Except for information on the Program Operations Report, the data tape and the USOE forms contained mostly objective characteristics of the VCIP programs, staffing patterns, expenditure patterns, and characteristics of the school within which the project resides. Responses to OE Form 269-2 consisted of written narratives regarding the accomplishments of the participating instructions and the services provided. A coding system in the form of a Coder's Manual was developed for mapping this written material into nominal categories. The material was then coded and entered into a computer file. Section II of this chapter provides details concerning content analysis procedures. (See Appendix B for copies of USOE Forms 269, 269-1, 269-2, and 269-3.)

The operational phase of the evaluation study was conducted from October 1977 to April 1978. Major activities during this period involved a content analysis for category identification, data quantification, data processing, and analysis. Several operations were undertaken to quantify the narrative data, to reduce the large number of raw data elements to a manageable set, and to develop profiles that were meaningful and informative. Care was taken to avoid techniques of sampling, data processing, or analysis that would introduce bias into the study results; equal care was taken in interpreting study findings.

II. CONTENT ANALYSIS

The content analysis process included category and variable identification, development of a standardized categorization manual, and subsequent quantification procedures. The Coders' Guide/Standardized Categorization Manual developed during the content analysis phase of the evaluaton study is provided in Appendix D along with a detailed description of the developmental process.

A. Category Identification

Program Operations Reports (OE Form 269-2) consisted of descriptions of veterans programs in paragraph narratives. To develop methods for abstracting and quantifying variables from these narratives, a stratified random sample of 50 institutions was drawn from the total sample of 400 institutions (see Appendix E), and Program Operations Reports (PORs) from this subsample of institutions were examined to develop a preliminary list of categories that were pertinent to evaluation.

In the preliminary work it was necessary to consider and code virtually all content in the subsample of PORs in order to cover the many possible contingencies. Considerable time and effort were required, since (1) redundancy of reporting was discovered, which had to be identified and dealt with; (2) a content overlap was found between separate paragraph narratives, requiring a scanning of the entire form to insure coverage of a particular content area; (3) some of the writing was obscure and in a few cases virtually uninterpretable; and (4) differentiation between specifically-requested information and that inherent in the Regulations required special attention.

Several iterations of development and review were required, particularly in order to arrive at variables which were both feasible to code and useful in the evaluation analyses.

B. Coders' Guide/Standardized Categorization Manual

The final list of topics, categories, and variables was developed, approved by USOE, and incorporated into a Coders' Guide/Standardized Categorization Manual. The purpose of the standardized manual was twofold: (1) it was used as a tool for the immediate VCIP Evaluation quantification task, and (2) it served as a guide for any subsequent data collection and evaluation (see objective 3, described in Chapter 1, Section III.B). As a result, it was important that all aspects of the quantification and content analysis process be clearly documented within the manual. Because the PORs varied widely in the amount and type of data they contained, both general and specific instructions were necessary to cover the variety of possible questions which might arise during the quantification procedures.

The coding task required a consistent approach to the method of content analysis; thus, the manual included training steps and described a set of rules to guide the coder through the PORs and aid when particular problems arose. The coding scheme reflected in the Coders' Guide required the coder first to read the entire POR, gaining a "contextual sense" of the institution and the OVA, and only then to code specific items of information. It was felt that such a procedure provided more meaningful data, but it also implied additional time and effort and the frequent need for the coder to engage in inference rather than simple notation and coding of predetermined content.

C. The Quantification Procedure

The purpose of the coding task was to reduce narrative paragraph responses to manageable and quantifiable data. Five raters participated in the total coding effort involving POR's from 400 institutions.[10] These quantification activities replaced the written paragraph narratives with a series of binary variables indicating the presence or absence of services, program functions, and other descriptive material.

III. PROCESSING AND MANAGEMENT OF DATA

Considerable effort was taken to produce a complete data set that was free of the types of errors often introduced during processing. Greater detail regarding these operations is provided in Appendix F.

A. General Processing

A subset of variables to be used in the study analyses was obtained from the VCIP data tape, and selected variables from the paper files (USOE Forms 269, and 269-3). These latter variables were coded and merged with the former into an on-line data file. The data were edited for completeness and examined for inconsistencies and other obvious data error. After quantification activities were completed (see Section II above), the POR-coded data were keypunched, verified, and merged onto the data file following range and consistency checks. A separate file was developed for a reliability substudy which consisted of 180 coded POR responses (3 raters x 30 institutions x 2 occasions).

B. Elimination of Institutions

One institution was eliminated from the reliability study analyses on the basis of indeterminacy of variables selected for inclusion in the generalizability analysis (see Data Quality, Section IV). Two institutions were subsequently eliminated from further analyses on the basis of highly suspect responses to USOE Forms 269, 269-1 (as reflected on the VCIP data tape), or 269-3. The reported data were so disparate (as much as 18.96 standard deviations from the mean) that inclusion into analyses could have distorted subsequent analyses.

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[10] Three raters, selected for a reliability substudy, independently coded the same 30 pre-selected institutions on two different occasions, for an actual total of 550 coded PORs.

C. Preliminary Data Reduction

To reduce the variables to a more meaningful and manageable set, univariate frequency distributions were examined. On the basis of these examinations and certain logical considerations, some variables were excluded due to lack of variability and others were combined into aggregate or composite variables.[11] The variables were then grouped into conceptually similar variable sets.[12] These sets were determined by joint decisions of RTI, OPBE, and VPB, and each set was comprised of variables that were logically related in terms of some common dimension (e.g., size measures, expenditure measures, measures of a particular area of VCIP regulatory concern).

As a result of grouping decisions, nine variable sets were established. The variable sets may be characterized as follows:

1) Institutional demographic characteristics
2) VCIP resource level
3) OVA expenditures and obligations
4) OVA personal services offered
5) Outreach and recruitment
6) Available services
7) Professional assistance available
8) Problems and resolutions
9) Coordinator's qualifications and responsibilities.

The first four sets were comprised of the more objective variables obtained from USOE Forms 269, 269-1 (or from the Student Financial Aid Master File, as reflected in the VCIP data tape entries), and 269-3. The remaining five variable sets were comprised of indices derived from the paragraph narratives of OE Form 269-2.

The specific variables comprising each of the variable sets specified above are indicated in Appendix A of this report. Variables that were eliminated from consideration as a result of frequency analysis (i.e., variables with minimal variation) are not included.

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[11] For example, the incidence of occurrence of certain specific academic study skill program components was small, so a general academic study skills variable was defined as a two-valued index or no study skills services (0), versus 1 or more study skills services (1). See Appendix F, Section IV.A, for the construction of analysis variables.

[12] Some variables were considered of sufficient individual importance or of a sufficient unique nature to stand alone in analysis; these variables were not grouped.

IV. DATA QUALITY

Two related problems of data quality are typically present in studies such as the VCIP Evaluation. One problem is introduced by incomplete, inconsistent, or otherwise indeterminate responses; another concerns the validity and reliability of responses. This section will address these issues; greater detail is provided in Appendixes F and G.

A. Data Indeterminacy

Incomplete data were handled in several ways. Where data were missing from USOE Forms 269, 269-1 (as reflected on the VCIP data tape), or 269-3, imputation techniques were typically utilized. For 44 institutions, imputation was required for one or more of the variables concerned with the numbers of Category I and Category II veterans in April 1975, October 1975, and February 1976. If a value was missing, the value for the closest previous date was used in analysis. For two cases in which there was no value for Category II veterans in April on any of the USOE forms, the value contained on the VCIP data tape was used (see Appendix C for VCIP data tape documentation).

For five institutions with no response for accreditation and seven institutions with no response for planned or average annual per capita instructional expenditures, a zero value was used. Because the VCIP data tape did not distinguish between zero and missing on variables obtained from OE Form 269-1, it was felt that the overall additional effect of this decision would be minimal.

A total of 36 institutions had not provided full data on OE Form 269-2. These institutions were replaced by new institutions, selected at random from within the same stratum. To the extent that the institutions with complete data differ in a significant way from those institutions without complete data, the replacement procedure will introduce bias in the calculated estimates; however, selecting replacement institutions from within the same stratum should minimize any such differences. Since the purposes of the study necessitated full data sets for the 400 examined institutions, it was nonetheless decided to replace institutions with incomplete forms under the assumption that any bias introduced would be minimal. Even after replacement, seven institutions exhibited at least one indeterminate item. It was decided to code such missing values as zero.

The rather extensive use of imputation techniques signals some cautions in interpreting results of analyses based on these variables. Moreover, the indistinguishability (on both the VCIP data tape and for certain RTI-produced data elements) between missing data and a "true" zero value obviously introduces a considerable amount of "noise" into the results.

B. Data Reliability

Analyses were conducted to investigate the feasibility and reliability of the quantification indices derived from the POR paragraph narratives. These analyses address the quality of the data extracted from responses to open-ended items on OE Form 269-2.

A generalizability study (Cronbach, et. al., 1972) was chosen to investigate rater consistency, instead of the classical stability indices of interrater (lack of agreement between raters) and intra-rater (lack of agreement within raters over occasions) reliabilities. Appendix G details the procedures of the generalizability study approach.

The generalizability analysis took place at two levels. The first level involved the stability of 307 raw data elements (binary indices) extracted from the POR's. The second level involved the stability of the 67 individual variables (typically composites of the raw data elements). At both levels, additional analyses were conducted to compare differences between the stability of ratings of elements deemed hard-to-rate and those labeled easy-to-rate. In addition, multivariate generalizability analyses produced a generalizability coefficient for the total subset of easy-to-rate, hard-to-rate raw data elements and for the total subset of variables.

The estimated generalizabilities were quite low for both the raw data elements and the variables. The average coefficient was approximately .23 for the raw data elements and .38 for the composites. A comparison of the generalizability coefficients between hard-to-rate and easy-to-rate variables indicated little if any difference in the coefficients associated with that classification. In neither case did the average generalizabilities approach acceptable levels. The multivariate generalizability coefficients reflected the univariate results. (The results of the generalizability analysis are detailed in Appendix G.)

The generalizability analyses indicated that the reliability of data elements abstracted from the paragraph narratives was quite suspect. Thus, results of analyses based upon these data should be interpreted with extreme care.

V. APPROACHES TO ANALYSIS

Analyses consisted of an empirical determination of natural groups (clusters) of similar (homogeneous) institutions in order to describe the similarities and differences of VCIP projects. The previous data processing steps (described in Section III), including preliminary data reduction, had been conducted to prepare the data for analysis. Analysis weights for the 400 institutions were sufficiently similar that all analyses were conducted using unweighted data.

A. Factor Analysis

Additional data reduction was undertaken through factor analytic techniques.[13] Through this process, 130 of the remaining data elements were reduced to 23 factors describing the projects and institutions in the VCIP evaluation. Separate factor analyses were conducted within each of the previously established variable sets (as described in Section III.C and Appendix A). Final factor solutions were examined, interpreted, and used to generate composite scores for each institution on each of the indentified factors. Regression techniques were used to estimate the combination weights of the variables to develop factor scores (see Appendix F, Section V).

The 23 factors describing the VCIP data, in terms of the nine predetermined variable sets, may be characterized as follows:

Institutional demographic characteristics--1) cost and 2) size;

VCIP resource level--3) number of Category I veterans and 4) number of Category II veterans;

OVA expenditures and obligations--5) VCIP expenditures and obligations and 6) non-VCIP expenditures and obligations;

OVA personal services offered--7) counseling and outreach services, 8) OVA persons versus coordinators, 9) OVA support services, and 10) recruitment;

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[13] Factor analysis is a common method for examining and assessing the underlying structure or pattern of relationships among many individual variables, and a convenient technique for data reduction. The actual procedures used involved an interative principal factor solution followed by oblique rotation to simple structure. See Appendix F for greater detail regarding the factor analytic data reduction step.

Outreach and recruitment--11) media recruitment efforts, 12) personal recruitment efforts, and 13) outreach and identification;

Available services--14) cognitive remedial services and 15) affective remedial services;

Professional assistance available--16) specific counseling and 17) general counseling;

Problems and resolutions--18) OVA related, 19) VA related, and 20) other problems;

Coordinator's qualifications and responsibilities--21) project activities and services orientation, 22) management and coordination, and 23) educational level and experience.

B. Cluster Analysis

Once the data had been reduced, analysis activities were directed toward identifying those variables that best defined the similarities and differences among the VCIP projects and their host institutions. The first step in this procedure was to identify the number of different types of projects/institutions and to subsequently categorize each project/institution by type. This particular taxonomy problem was approached through a form of cluster analysis.[14] The clustering procedure formed groups (in this case VCIP/institutions) that were as similar as possible within each cluster and as different as possible between clusters. The clustering technique employed in this study considered all institutions (cases) in the sample and generated a complete hierarchical structuring with 397 possible solutions, ranging from 398 clusters,[15] with one institution per cluster, down to two clusters, which together contained all the institutions.

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[14] Basically, clustering is the process of organizing individuals, objects, or events according to their similarities on specified attributes or variables. Initially, there are three essential, interrelated considerations of the clustering problem: (1) defining a set of variables or factors on which institutions could be taxonomized (see subsection B above), (2) specifying a quantitative index of profile similarity, and (3) selecting a grouping method. Discussion of these initial considerations and the techniques selected for this study are provided in Appendix F, Section VI.

[15] Two institutions were eliminated from the analyses on the basis of highly suspect responses to USOE forms (see Section III.B).

The decision remained as to which of the 397 cluster solutions would be selected as the most appropriate. This decision was made in close collaboration with the USOE project officer and was based upon: (1) within-cluster similarity (as indicated by the index of within-group variation, i.e., the error term); (2) meaningfulness (whether the institutional clusters appeared to belong together based on knowledge of the VCIP programs defining them, i.e., did the cluster make sense?); and (3) size and number of clusters. The final cluster solution contained 12 interpretable clusters made up of 390 institutions.[16]

C. Profile Analysis

The established clusters were taken as established groups, and a subset of the original variables[17] of fundamental policy relevance, including variables not used in the clustering, were examined for differences over the groups of projects/institutions. The profile analysis was undertaken through two different approaches. First, the distributions of the individual variables were examined for cluster differences by crosstabulation approaches (a univariate approach); second, the pattern of cluster differences on a number of variables were examined simultaneously through multivariate analysis of variance.

1. Crosstabular Analyses

For particular variables of interest (e.g., institutional control, level of offering, Category I veteran enrollment) institutions were cross-classified on the basis of that variable and cluster membership. The percentage of institutions within each cluster for each variable of interest provided a description of cluster differences in the distributions of these variables.

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[16] The remaining eight institutions were either sufficiently unique to define a separate category or combined into a small (cluster size less than 4) cluster (see Appendix F). In either case, within cluster estimates based on such small number of institutions (3 or less) would have been unstable. Therefore, these eight institutions were not considered in subsequent analyses.

[17] The factor composites were not used in these analyses. While composites were useful for the data reduction necessary for the initial establishment of groups, such composites necessarily reflect more than one of the original individual data elements. Some of the individual data elements were of interest in themselves, and this subsequent step in the profile analysis was directed toward the more concrete original variables.

2. Multivariate Profile Analysis

While the univariate approach deals with differences between clusters on particular variables of interest, multivariate profile analysis deals with differences between the clusters on an entire set of measures or variables.[18] This technique of profile analysis was used to examine differences among clusters in the pattern of distributions of conceptually similar variables (e.g., expenditure patterns--VCIP and institutional funds; veteran enrollment patterns--Category I and Category II for distinct time periods; staffing patterns).

Specifically, the cluster profiles were examined for parallelism (do the group patterns have the same shape?); for profile level (do the patterns of each group have the same average level?); and for flatness (is the combined overall profile a straight line with zero slope?). It should be recognized that the test for parallelism is essentially a test of interaction, and if significant interaction exists the other tests are less appropriate and less meaningful.[19]

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[18] See Harris, Richard J. A Primer of Multivariate Statistics.

[19] Given the fact that a number of the variables involved at this point were used, in part, to determine the clusters, it was to be expected that the level hypothesis would be rejected--a given cluster certainly differed on at least one of the dependent variables. Similarly, for most of the variable sets considered, flatness was not expected. Therefore, the real question of interest to be addressed was whether the various program clusters display different patterns of mean levels across the various measures (i.e., nonparallelism).

Chapter 3

Findings

I. GENERAL

As described previously in this report (see Chapter 2, Subsection V.C), clusters of similar institutions and OVA programs were formed on the basis of available data. This chapter examines the nature of the resulting institutional clusters and attempts to classify and characterize OVA programs in terms of some major differences and similarities. In considering the results presented below, two underlying constraints should be kept in mind: (1) while the variables used for the empirical clustering of the institutions were the composite factor scores, the variables examined in this chapter are the more basic data elements; and (2) the data elements used in all analysis (factoring, clustering, and subsequent examination of cluster differences) were far from completely reliable (frequently to the extent of being below normally acceptable limits).

The interpretation of results presented in the text of this chapter are generally accompanied by supporting tabular or graphic summaries. More detailed tabular summaries of each analysis performed and reported are presented in Appendix H. Reference to appropriate tables of that appendix are provided in the text. The critical reader may wish to refer to these tables for the specificity of detail that has been omitted from the textual presentation for purposes of brevity and tone of presentation.

II. CHARACTERISTICS OF THE INSTITUTIONAL CLUSTERS

As a result of the empirical clustering, twelve major groups of institutions, accounting for 390 of the 398 institutions considered and ranging in size from 9 to 70 institutions, were established.[19] A description of these groups of homogeneous institutions serves to point out similarities and differences in the institutions/programs defining the various clusters. The most obvious differences between clusters (or similarities within clusters) are defined by the factor scores that were used in the actual cluster solution[20]; differences and similarities between groups in respect to the factor scores are given in Table H.10 (see also Table F.27). The interpretation of some of the composite variables defining the factor scores is not, however, always straightforward; therefore, the approach taken in this section is to attempt to distinguish the clusters in terms of the underlying individual variables that contributed to the factor scores and structures.[21] The basic nature of cluster profiles is depicted in Table 3.1 for the major discriminating variables; interpretation of the types of institution/program comprising the twelve clusters are provided in the following subsections.

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[19] Recall that two of the 400 institutions were excluded from the factor analyses and subsequent clustering due to discrepant values on some of the underlying variables. Of the remaining 398 institutions, eight did not cluster with the twelve major groups but rather represented separate small (one to three member) groups. Since these discrepant institutions were considered to represent institutional outliers of no general interest and since computed characteristics of such small groups would be unstable, these institutions were excluded from analyses of cluster differences.

In considering the characterizations of the clusters it is important to recognize that two classes of variables contribute to cluster differences. One class represents institutional or program "fact of record" -- e.g., size of undergraduate student body, numbers of veterans enrolled, expenditures, numbers of staff, etc. A second class of variable is essentially based on content analysis of response to paragraph narratives on the Program Operations Report. These second class of variables may not only be influenced by the degree to which the report writer chose to provide detail (as opposed to the degree certain functions are carried out), but also by reliability considerations (reliability of report; reliability of rating). More important, however, is the likelihood that the data used in the factor analyses and subsequent clustering consisted, on the one hand, of relatively objective institutional data and, on the other, of relatively subjective program data. While it is reasonable to ask how program variables, however subjective, interact with institutional and other program variables, however objective, it should be noted at the outset that the data and procedures may have forced an association of Class A institutions with Class X programs and Class B institutions with Class Y programs. To some extent, as will be seen, this is what emerged.

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[20] By virture of the procedure used in clustering, the factor scores will show maximum differences between clusters and maximum similarity within cluster.

[21] To accomplish this, each variable was collapsed into two to four categories to produce contingency tables having, for the 12 clusters, from 11 to 33 degrees of freedom and in an attempt to equalize as near as possible the row frequencies for each comparison. Particular attention was directed to the comparisons for which Chi-Square statistics were significant at or beyond the.025 level (see Appendix H, tables H.1 through H.9).

Cluster Profiles for Selected Variables

(N)	Cluster	Total undergrad. enrollment	Undergrad. Veterans enrolled	Number of Category I Veterans	Number of Category II Veterans	Average annual per capita instructional expenditures	Total VCIP award	Non-VCIF funds	VCIP funds for OVA expenditures	Non-VCIP funds for OVA expenditures	Institutional share of award	Total FTE personnel for the OVA	Total VCIP staff funds for the OVA	Total staff funds for the OVA	Outreach and recruitment	Available services	Professional assistance	Problems and resolutions	Coordinators qualifications
56	A	-	-	-	0	-	-	+	-	+	-	0	-	0	0	0	0	0	0
23	B	-	-	-	-	0	-	0	-	0	-	-	-	-	0	0	0	0	0
70	C	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	E	‡	‡	‡	0	‡	‡	‡	‡	‡	‡	‡	‡	‡	0	0	0	0	0
38	F	0	0	0	0	0	0	0	0	0	0	+	+	+	0	0	0	0	0
9	G	‡	‡	‡	+	0	‡	0	‡	0	‡	+	‡	‡	0	0	0	0	0
30	H	0	0	0	0	0	-	0	-	0	0	0	-	-	0	0	0	0	0
63	I	-	-	-	0	0	-	0	-	0	0	-	-	-	0	--	--	--	0
21	J	--	--	--	-	‡	--	0	--	0	-	-	-	-	--	0	0	0	0
9	K	‡	‡	‡	⊕	-	‡	0	‡	0	‡	‡	‡	‡	0	0	0	0	0
13	L	⊕	⊕	⊕	+	-	⊕	0	⊕	0	‡	‡	⊕	⊕	0	0	0	0	0

⊕ greater than 2.0 standard deviations above the mean

‡ between .5 and 2.0 standard deviations above the mean

+ between .25 and .5 standard deviations above the mean

0 less than ± .25 standard deviations from the mean

- between .25 and .5 standard deviations below the mean

-- between .5 and 2.0 standard deviations below the mean

3.3

A. Cluster A: The Small Student-Oriented Institutions

This cluster consisted of 56 institutions. The majority of these institutions are small (i.e., two-thirds have undergraduate enrollments of 2,500 or less). The total undergraduate veteran enrollment tends to be fewer than 500 veterans on campus, and April 1975 counts, in particular, are low, although there is a suggested trend for October 1975 and February 1976 numbers to be larger. Total VCIP funding corresponds with the smaller size of the OVA operations. Assistance and support activities emphasize remedial instruction in the basic skills area, instead of more general remedial services (e.g., academic counseling); at the same time, there is particular emphasis in counseling activities on personal, family, or career problems. The OVA offices in these institutions have relatively few difficulties in interacting with the outside VA policies and practices, but concern themselves with obtaining what they need at the institutional level. Coordinators feel little need to emphasize communications and laison functions.

It is reasonable to assume that OVA activities in Cluster A institutions are shaped substantially by the small-institution climate. Little attention is spared for management-coordination-laison problems. Academic problems of veterans are served by teaching or curricular devices that are part of the academic program, rather than by such general support mechanisms as counseling or tutoring. OVA energies are directed toward providing personalized services to the student as an individual (rather than interacting with faculty and administration on the general behalf of veterans), and toward mobilizing other regular college services to work for the individual.

B. Cluster B: The Little Academes

This cluster consisted of 23 institutions. These institutions also tend to be small, and have generally fewer than 500 veterans enrolled on campus; but per capita instructional expenses tend to be high. Total VCIP funds are low, as is the institutional contribution to OVA activities. The OVA operation is typically viewed as a management enterprize, and the staff, in general, focus on basic services, giving particular emphasis to counseling on personal, family, career and job placement problems. Emphasis in counseling also includes assistance with financial problems, an activity probably necessitated by the higher instructional costs. The climates at these institutions do not appear particularly supportive of remedial courses, perhaps revealing this group of institutions as an academically elite counterpart of Cluster A institutions.

Problems in interacting with the VA appear to be less frequently resolved than is the case for other institutions.

In summary, Cluster B institutions appear to contain many relatively small, high cost, traditional academic program colleges and universities. The OVA offices have a business-like atmosphere (e.g., the emphasis is more on applying a set of predetermined problem solving strategies than on a highly personalized service), and focus on resolving personal, financial, and career problems. Remediation--as a general or an instructional support--is either not needed or perceived as particularly inappropriate.

C. Cluster C: The Basic Services OVA Institutions

The 70 institutions in this cluster, while not markedly deviant from the total group in size, tend to have small total undergraduate enrollment and small numbers of veteran students enrolled, and to invest little institutional monies (as opposed to VCIP funds) in the OVA activities. Outreach and recruitment activities are not particularly stressed; OVA staff concern themselves with resolving problems of interacting with the VA, and with counseling students on personal and academic problems. There is little concern with job placement. The data suggest that, while the institutional environment is not hostile to veterans, it may be somewhat apathetic in their regard, and that OVA activities are adjunct rather than mainstream activities.

D. Cluster D: The Promotor OVA Institutions

The 43 institutions in this cluster are remarkably similar to the total group in most respects except that OVA activities stress recruiting or outreach activities and the basic services. Much time is spent by OVA staff in resolving problems concerned with VA policies and services, and with other general problems outside of OVA functioning and student-related problems *per se*. Coordinators tend to emphasize tutorial rather than general counseling assistance; general emphasis on academic study skills is relatively low. The distinctive feature of this group appears to be one of "let's bring in the veterans, and help them with the subject matter of their studies."

E. Cluster E: The Big Public Institutions

This cluster consist of 15 institutions. Although, as in most of the other clusters, all conventional classifications of institutions are found, there is a relative preponderance of large universities--all public--serving large numbers of veterans. Per capita instructional expenses tend to be relatively high. The OVA program and its various functions tend to be well funded, with budgetary emphasis on OVA staff personal services, employee benefits, VCIP equipment, and supplies. The institutional contributions to OVA activities also tend to be proportionally high.

The institutions typically do not provide remedial work in the basic skills, but the OVA offices stress as an internal function general remedial services, and personal, academic, and vocational counseling. Outreach and recruitment are stressed, though mass rather than individual approaches are used here. No difficulties in recruiting are perceived, probably reflecting the apparent success of these efforts and/or the size advantage of the institutions. In spite of the size and probable complexity of the institution and the OVA program itself, management experience is infrequently stressed as a requisite for the OVA coordinators; instead, project personnel operate clearly in staff rather than line functions, with counseling, general remedial, and OVA basic service activity the principle content of staff activity.

Although the data are not sufficiently clear to establish firmly a conclusion that the OVA offices emphasize being all things to veterans, to the exclusion of promoting other regularly established support services these campuses must have, it seems noteworthy that laison and communication activity does not stand out as operational emphases.

F. Cluster F: The Management Oriented OVA Institutions

While the relative preponderance of the 38 institutions in this cluster are mid-range in size of undergraduate enrollment (from 2,500 to 8,000 students), the numbers of veterans served tend to be large. VCIP programs are well funded, and institutional contribution to these costs are relatively high.

OVA staff size tends to be modest, but the budget for staff support tends to be high. Coordinators frequently come from a background of program management responsibility, and accordingly spend significant time in general supervision, coordination, direction (as for outreach activities) or administration (as for the establishment of special education programs). Emphasis is also given both to recruiting, which appears to move smoothly and successfully, and to personal, academic, and vocational counseling.

G. Cluster G: The Well-Developed OVA Institutions

This cluster of 9 institutions contains a preponderance of four-year institutions with relatively large enrollments and large numbers of veterans. It is also remarkable in that the OVA function appears to be well financed (especially from VCIP support), existing in a cordial and generally supporting institutional climate. For example, remedial work in the basic skills is not alien in the college curricula represented; yet, much attention is given by the OVA to the further development of special education programs and to academic study skills for the student veteran. The OVA FTE staff is relatively large, and, though the number of full-time counselors is relatively low, there is emphasis on personal, academic, and vocational counseling. Outreach and recruitment activity is seen as a significant management function; however, recruitment functions follow the all-institution trend (with the notable exception of emphasis on outdoor advertising), but with more than average difficulties.

Communication, laison, and coordination functions are particularly stressed, and basic services are differentiated and specialized (e.g., general counseling or general remedial activities as such are less frequently seen as functions). Insitutional, OVA-administrative, or student service problems are not significantly different from those of the total group of institutions, though problems with VA policies and practices are both experienced and resolved more frequently than for the total group. In short, the institution is a cordial and supportive host, and the OVA programs suffer, if at all, from external rather than internal difficulties.

H. Cluster H: The Large OVA Public Institutions

This cluster of 30 institutions consists of almost all (97 percent) public schools, but, unlike Cluster E, it conforms relatively closely with the all-institution average as to size of undergraduate enrollment and tends to contain proportionally more institutions with smaller numbers of veterans. OVA offices appear relatively well staffed, and coordinators rank high on general program management experience. The significant emphasis in activity is counseling, internal management, and coordination at the function rather than the program level (as opposed to communication and laison with non-OVA campus functions and services). The establishment of special education activities is also given special emphasis. Little emphasis, relative to that for the total group of institutions, is placed on financial counseling, job placement, or teaching-tutoring.

I. Cluster I: The Minimal OVA Service Institutions

The 63 institutions in this cluster tend to have heavier representation of small (in terms of undergraduate enrollment), private schools, and typically involve lower numbers of veterans. The major distinguishing feature, however, appears to be that in spite of a relatively high number of full-time or FTE staff in the OVA, activities and emphases either follow the modal pattern for all institutions, or reveal significantly less emphasis on many basic or usual functions. OVA funds in general and the institutional shares thereof tend to be relatively low. Although the dominant activity of staff appears to be general counseling, there is a relatively small number of full-time counselors, and less than typical emphasis is placed on personal, educational, vocational, or financial counseling. Activities associated with the basic services to veterans, as well as coordination of the minimal counseling function, are relatively less emphasized, as is any teaching/tutoring function.

Any difficulties in OVA functioning, or problems in serving students, are not apparent in the profiles of individual variables as contained in the institutional reports. Interaction of the OVAs with their institutions also seems minimal, and there are relatively limited outreach and recruitment activities. The picture is one of OVA offices where not much unusual takes place, on small campuses (public or private, and junior college, college, or university) that offer relatively few remedial courses in basic skills and that contain smaller numbers of veterans.

J. Cluster J: The Minimal OVA Service Elites

These 21 institutions tend to have small undergraduate enrollments and small numbers of veterans; private colleges are slightly overrepresented. The principal institutional characteristic, however, appears to be one of high per capita instructional costs, with the OVA experiencing low VCIP funding, and average financial contribution from the institution. Staffing accordingly is sparce; management problems are few (though OVA functioning problems that do exist have a low resolution rate). Recruiting and outreach activities receive relatively limited attention, as do general remedial services, the establishment of special educational programs, or special activities like assistance on academic study skills.

K. Cluster K: The Public Service Institutions

This cluster consists of 9 institutions. Although comparable to the total group in terms of proportion of public or private institutions and by level of instructional offering, this cluster contains a relative preponderance of large institutions with relatively low per capita instructional expenses. Relatively large numbers of veterans are served through OVA programs well staffed and budgeted. The cluster is noteably different from all other groups in terms of the markedly large number of Category II veterans enrolled. High VCIP funding is supplemented by an average institutional contribution to costs. Most of the traditional OVA activities are emphasized, in an institutional climate that appears to be generally supportive of remedial courses. Counseling appears to be a part-time function, but the FTE counselors represent a relatively higher population of the total staff complement than is the case for institutions in general. Emphasis in counseling is on such pragmatic matters as financial problems or career decisions. General remedial services, and support of special education programs, is apparent. Recruiting and outreach activities appear moderate, or in line with the all-program average. Management emphasis at the total program level also appears to be a significant concern.

L. Cluster L: The Urban Community Colleges

Although all clusters contain two-year colleges (the minimal proportion being about one-third of the cluster institutions in Cluster E), more than 90 percent of the 13 institutions in Cluster L are two-year colleges, and all are publicly controlled (as was the case for Clusters E and K). Undergraduate enrollment and numbers of veterans served tend to be high, as are VCIP funds and institutional shares thereof. The institutional climates support remedial work generally, and the OVA support service activities carry this emphasis as well, with special education, study skills, and academic counseling receiving heavy attention. Recruiting activity proceeds through media and personal appearances of staff in the sending areas. As would be appropriate for programs that are well funded and staffed, with veteran populations' needs fitting rather well the needs that VCIP program guidelines suggest, management, coordination, laison, and communication activities receive heavier attention than for the total group.

III. CLUSTER PROFILE DIFFERENCES

As a further examination of cluster differences, the patterns of certain sets of program-related variables (veteran enrollment patterns, expenditure patterns, staffing patterns) were examined among the various clusters through multivariate profile analyses. These analyses provide a more rigorous test of possible cluster differences than was possible for the single variable examinations reported in the previous section. Within a particular set of variables, these multivariate statistical tests were conducted: (1) a test for parallelism (whether or not the pattern of individual variable means have the same shape for all groups), (2) a test for profile level (whether or not the average of all variables is the same for all groups), and (3) a test for flatness (whether or not the combined group averages for the individual variables define a straight line with zero slope).

Although the cluster profiles for each of the analyses conducted are provided in accompanying graphs, actual mean values and standard deviations for the variable of interest are provided in tables H.14 through H.19. Specific details of the several multivariate analysis of variance that were performed are provided in tables H.20 through H.22.

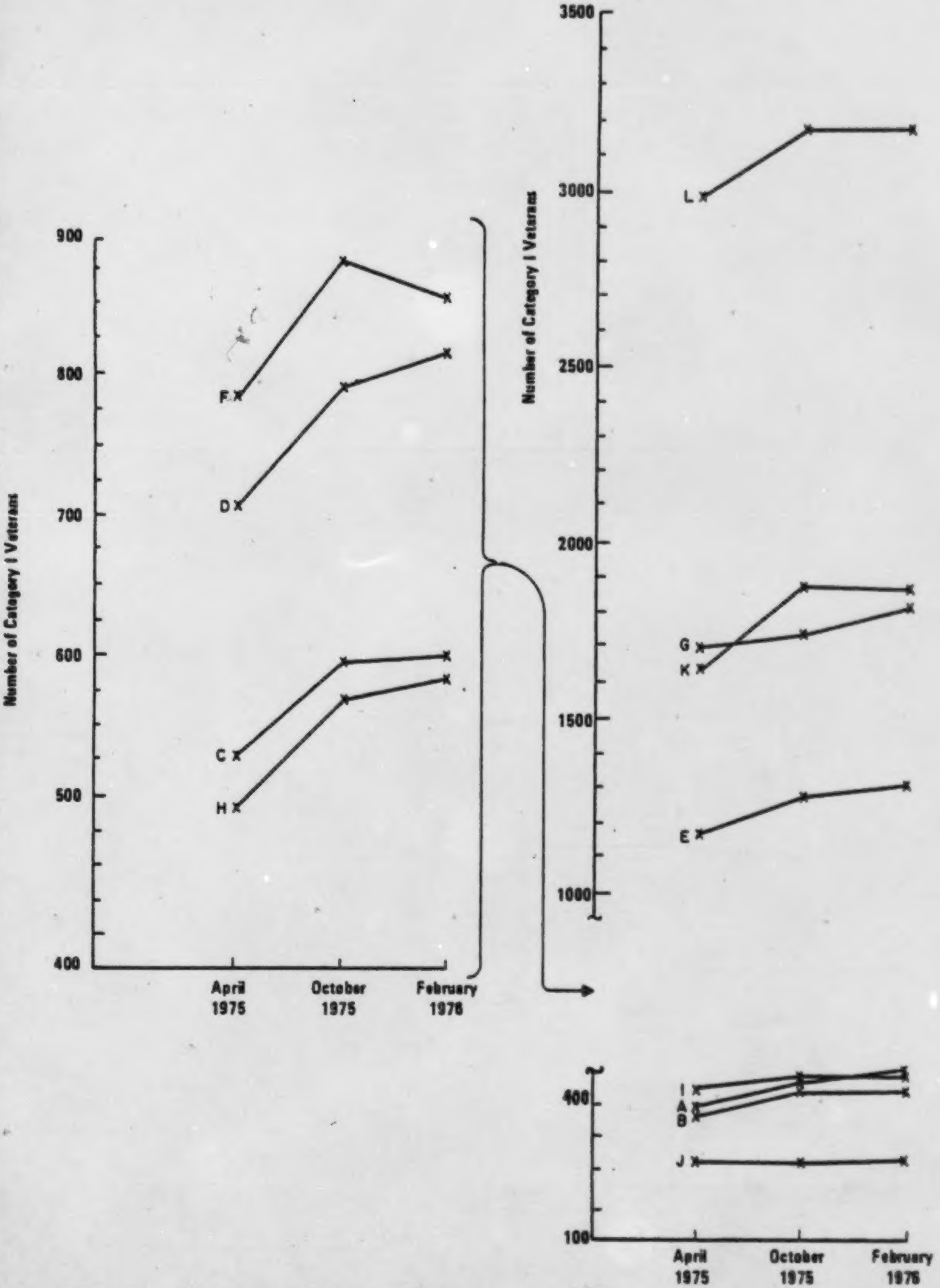
A. Veteran Enrollment Patterns

Figure 3.1 shows the cluster averages of number of Category I veterans enrolled at each of three time points: April 1975, October 1975, and February 1976. The average cluster level for number of Category I veterans varies from 208 (April 1975, Cluster J) to 3,185 (February 1976, Cluster L). Although the shape of the enrollment patterns show some differences by cluster, the trend in all clusters is toward a general increase in the number of Category I veterans over time.

Figure 3.2 presents the cluster averages of number of Category II veterans for the same three time periods. The average cluster level of Category II veterans ranges from 13 (April 1975, Cluster B) to 802 (October 1975, Cluster K). Except for cluster K, the cluster averages of Category II veterans is below 150 for all three months. Category II enrollment shows an increase from April 1975 to October 1975 for some clusters, but almost as frequently shows a decrease in enrollment; however, the general trend for Category II veteran enrollment typically increases between October 1975 and February 1976.

Figure 3.1

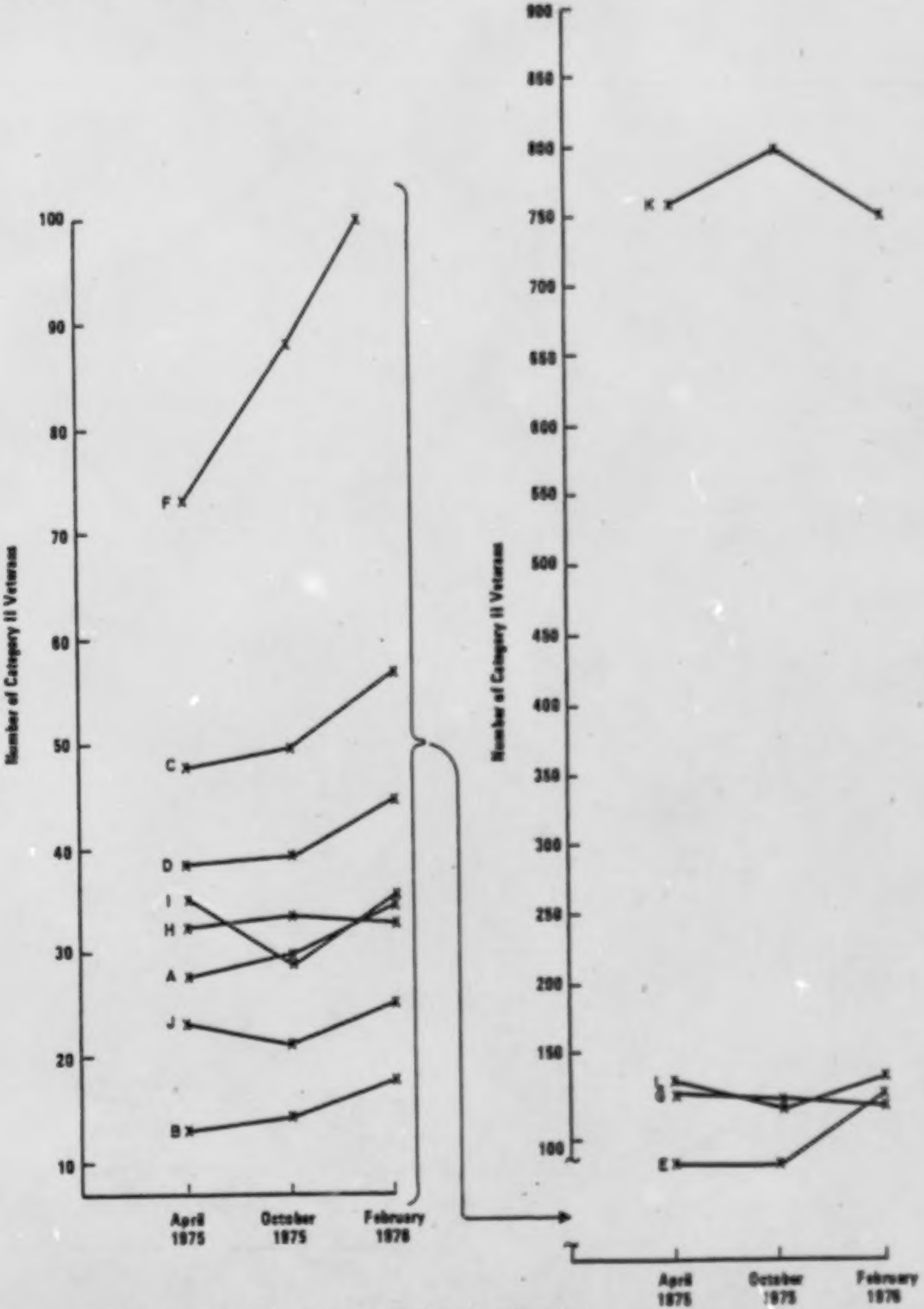
Mean Number of Category I Veterans Enrolled in April 1975, October 1975, and February 1976*



*NOTE: The scale for Number of Veterans is different for each graph.

Figure 3.2

Mean Number of Category II Veterans Enrolled in April 1975, October 1975, and February 1976*



*NOTE: The scale for Number of Veterans is different for each graph.

Although the profiles are different in shape (the patterns of veteran enrollment are significantly different between clusters when considering both categories of veterans, $p < .001$), the preponderance of differences among the clusters is in the average level of veterans enrolled. A statistical test of Category I and Category II enrollment levels indicated that cluster profiles for these variables were statistically significant ($p < .001$). Enrollment patterns for Category I and Category II veterans vary considerably more in level than in the trend of enrollment over time, although a test of flatness considering both categories simultaneously indicated that slope was significantly different from zero ($p < .001$), as might be expected given the difference in level for the two separate veteran categories. Still, veteran student enrollment patterns tend to show more similarity in the pattern trend for the two types of veterans and in pattern trend over time than in average level of students enrolled. The most obvious veteran category difference is in cluter K, which stands alone in enrolling large numbers of Category II veterans.

B. Expenditure Patterns

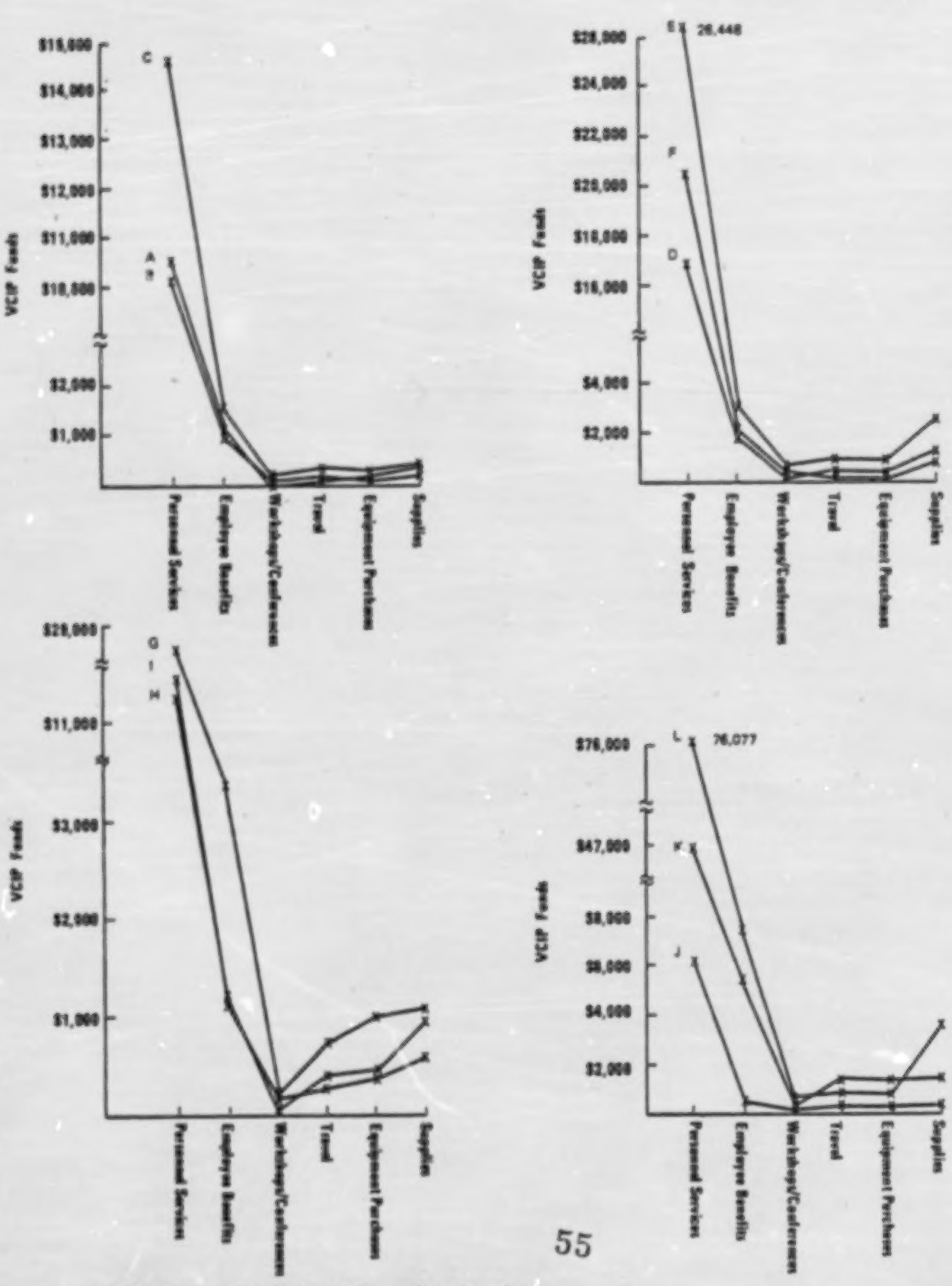
Figures 3.3 and 3.4 show cluster profiles for average VCIP and non-VCIP OVA expenditures and obligations, respectively, for each of several line item expenses. The average expenditures vary greatly among clusters and different scales are used for different clusters to facilitate the presentation. The average VCIP expenditure for personnel services (clearly the greatest expense within any cluster) varies from as little as $6,207 for Cluster J to as much as $76,077 for Cluster L. Employee benefits are the next largest VCIP expenditure and vary from less than $483 for cluster J to as much as $7,638 for Cluster L.

Non-VCIP expenditures and obligations exhibit similar profiles to VCIP expenditures but a a lower level. Cluster L reports the lowest average non-VCIP expenditure for personnel services, $4,875 as compared to Cluster E which reports more than $20,000 of non-VCIP funds for personnel services. As was the case for VCIP funds, the second largest non-VCIP expense in most cases is employee benefits with a range of from less than $400 (Cluster B) to more than $2,000 (Cluster E).

The shape of the profiles, although significantly different in shape among clusters ($p < .001$), do exhibit some basic areas of similarity within funding source. The similarity is probably overemphasized, however, by the

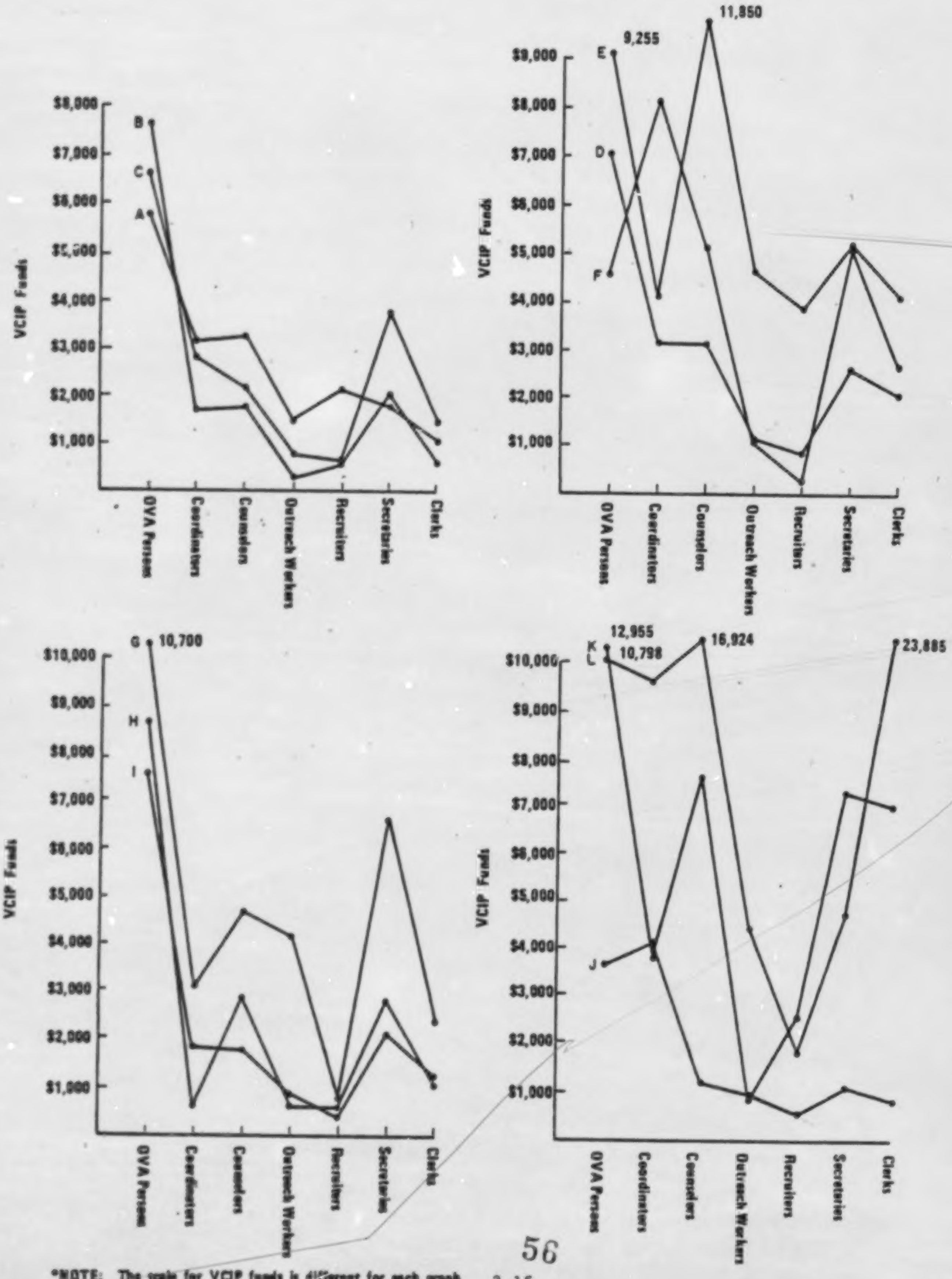
Figure 3.3

Mean VCIP Funds for OVA Expenditures and Obligations*



*NOTE: The scale for VCIP funds is different for each graph.

Figure 3.4
Mean Total Funds for OVA Personnel Services*



*NOTE: The scale for VCIP funds is different for each graph.

disproportionately greater expenditures for personnel services. A partial ordering of expenditures within cluster and within funding source, however, does reveal a similarity of profile at the ordinal level of measurement. The three greatest areas of expenditures are typically personnel services, employee benefits, and supplies; conversely, the three smallest areas of expenditures are workshop/conference, travel, and equipment purchase. This appears to be a reasonable allocation of resources, given the stated purposes of the program.

As would be expected from an examination of the figures, there were significant differences among clusters in total expenditure level ($p < .001$) and the combined profile did not define a flat line ($p < .001$). In this context, flatness would indicate an overall equal apportionment of funds to the various line items, which would certainly not be expected.

C. Staffing Patterns

Figures 3.5 and 3.6 show cluster profiles for average staffing patterns. Figure 3.5 presents the average number of full-time-equivalent personnel staffing different OVA positions by cluster. Figure 3.6 presents the average total funds for the staffing positions by cluster. As would be expected, clusters with a high number of full-time-equivalent personnel within a particular position report using larger amounts of total funds for that particular staffing position; however, the relationship between these two indices of staffing emphasis is far from perfect. Figure 3.5 shows Clusters E and L have more counselors than the other clusters, and Figure 3.6 indicates that these clusters typically report higher expenditures for staffing counselors. Cluster L has the highest average number of clerks and reports the largest total expenditure for clerks.

Although direct comparisons are somewhat clouded by differences in scale, the profiles presented in Figures 3.5 and 3.6 show considerably greater variation among project clusters than the profiles previously considered. As would be expected from the most cursory examination of Figures 3.5 and 3.6, the cluster profiles are not parrallel ($p < .001$), suggesting markedly different staffing emphases among the various clusters. Although less obvious from the figures, differences also exist in levels of overall cluster staffing ($p < .001$), and the overall profile does not define a flat line ($p < .001$). In this context, flatness would indicate an overall equal staffing (or staffing expense) across the various employee categories, which would not be expected. These latter findings are considerably less interpretable in light of the wide variation in patterns among clusters.

Figure 3.5

Mean Full Time Equivalent Persons Staffing OVA Personnel Services

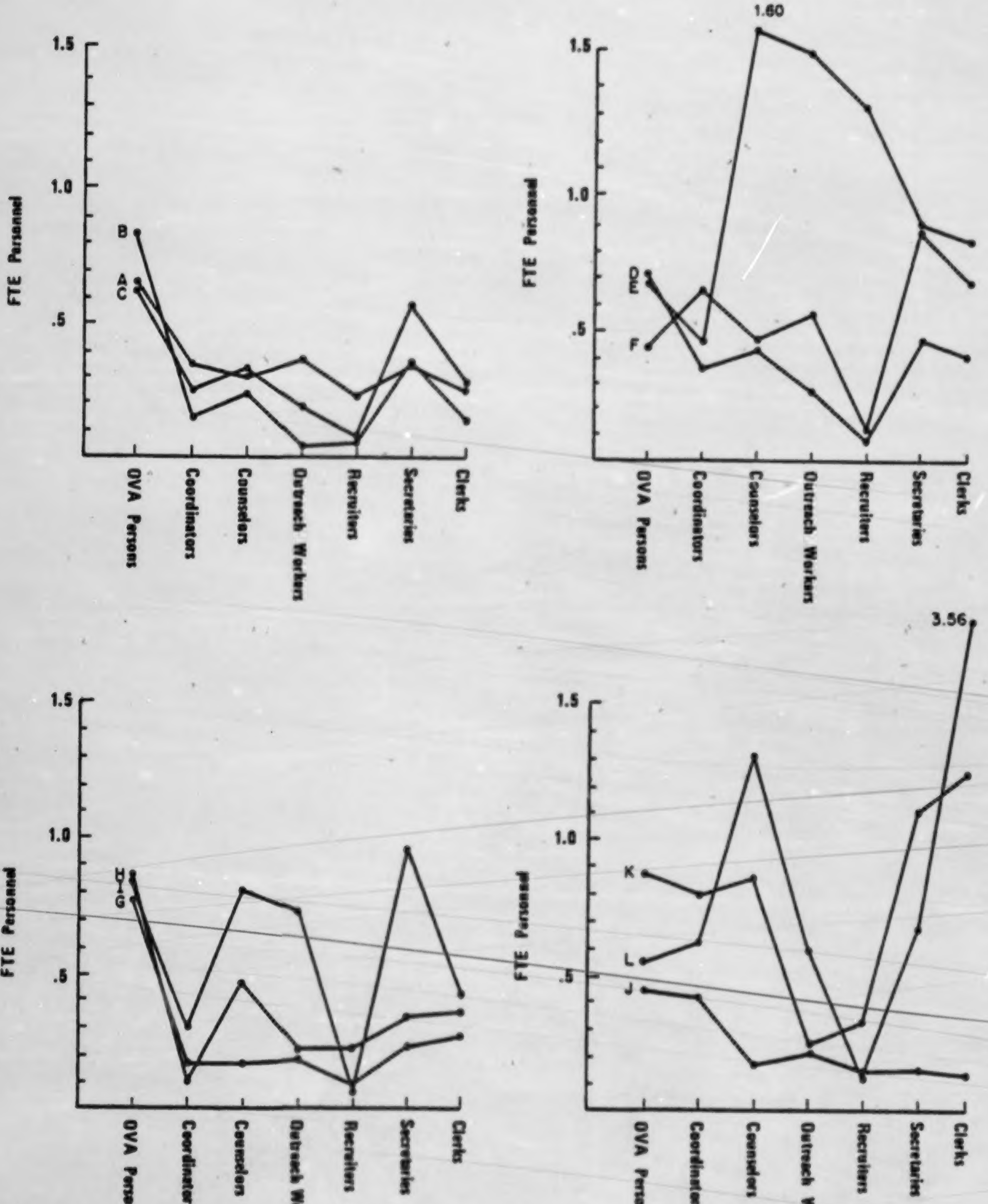
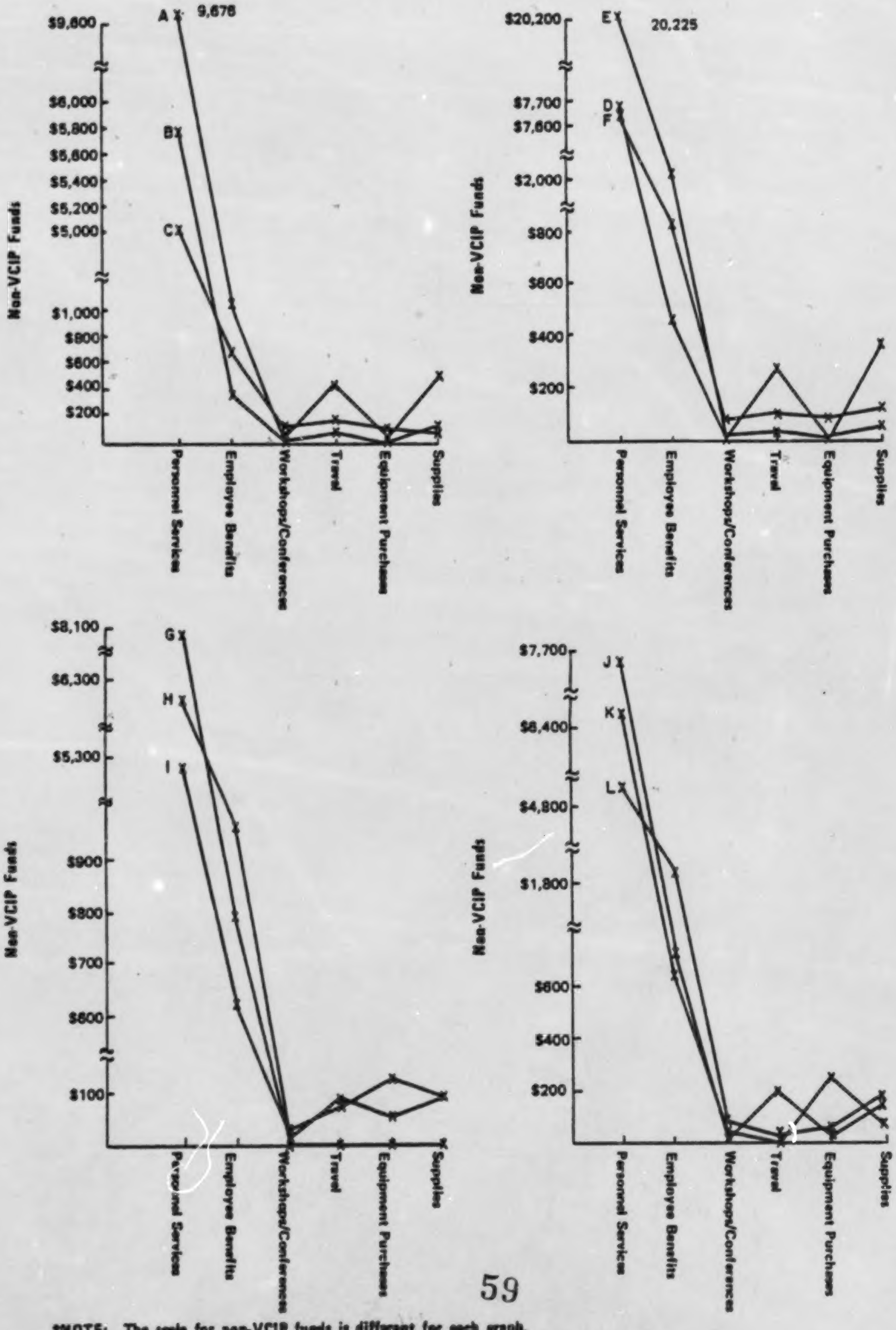


Figure 3.6
Mean Non-VCIP Funds for OVA Expenditures and Obligations*



*NOTE: The scale for non-VCIP funds is different for each graph.

D. Summary

These findings are in basic agreement with those presented in the previous section, as would be expected. Nonetheless, these results provide some additional insight into the nature of the cluster differences. In terms of veteran enrollment, some real but relatively minor differences exist between clusters in terms of enrollment over time and even greater differences exist in types of veterans enrolled (Category I or Category II--see particularly Cluster K). Beyond these differences, however, it appears that the major differentiating factor is the level (total number) of veteran enrollment.

Similarly, clusters differ somewhat in the pattern with which they allocate their funds to various line item expenses; however, the ordinal expenditure patterns were considerably more similar. Some allocation pattern differences also exist between types of funds expended, but for this area also the level of total expenditures seems to be the dominant factor in cluster differences (differences in total expenditure should reflect rather closely differences in number of veterans enrolled). Even so, such differences should reflect, at least probabilistically, differences in program operation, since greater availability of funds allows greater diversity in the types of services that can be offered to veterans.

In terms of staffing emphasis, considering either FTE personnel staffing the particular project positions or expenses within staff position, the staffing pattern differences assume a more dominant role in defining the clusters. There are, of course, differences among clusters in total level of staffing; however, they should be closely related to previously described differences among clusters in personnel services expenditures and similarly to total award. To the extent that different staffing patterns reflect basic programmatic differences in the operation of the OVA's, which is a reasonable assumption, then these findings suggest that the clustering was effective in capturing such programmatic differences among institutions.

IV. THE EXTENT TO WHICH PROJECTS MEET BASIC VCIP REQUIREMENTS

Three major requirements as stated in the VCIP Regulations are that the institition: (1) employ as OVA coordinator at least one full-time staff member whose service is to veterans; (2) insure that not less than 75 percent of VCIP funds awarded be used by the OVA to implement required services; and

(3) provide required services to veterans in the areas of recruitment, counseling, special education, and outreach. There are, of course, other requirements of VCIP programs; however, as stated previously (Chapter 1, Section III), these were the only requirements that could reasonably be assessed with the available data. These analyses were conducted for all 400 institutions in the sample; summaries of these analyses are presented in Tables H.23 through H.26.

A. Staffing

The regulatory requirements concerning staffing of the OVA differ depending on the size of the institution. Institutions with small numbers of students and veterans (those institutions with less than 2,500 students and no more than 70 undergraduate veteran students in attendance on April 16) are required to maintain a full-time OVA staffed by part-time or full-time employees who together assume the responsibility of at least one full-time equivalent employee. Institutions with more than 2,500 students or more than 70 undergraduate veteran students are required to employ at least one full-time staff member as OVA coordinator.

Institutions were classified as small or large (in accordance to the definitions provided above) on the basis of total undergraduate enrollment and total veteran enrollment as recorded on the VCIP data tape. Within each of these types of institutions, the appropriate staffing requirement was examined based on reports of project personnel as recorded on the VCIP data tape. Among the 26 small institutions, data from 4 (15 percent) failed to indicate the equivalent of one full-time staff member. Data from 15 (4 percent) of the 374 large institutions failed to indicate the employment of any full-time person. In total, the data for about 5 percent of the institutions failed to indicate that the staffing requirements were being met.

B. Percentage of VCIP Funds Used by the OVA

Institutions are required to expend not less than 75 percent of awarded funds toward implementing required services. Data relating to total VCIP award (excluding institutional funds), and to total OVA expenditures and obligations obtained from the VCIP data tape, were used to assess whether institutions met the expenditure requirement.

Of the 400 institutions in the sample, recorded data from 36 (9 percent) indicated that less than 75 percent of the total VCIP award was used for OVA expenditures and obligations. Fourteen of these institutions were within 5 percent age points of the 75 percent requirement, but data from 22 institutions (about 5 percent) indicated that less than 70 percent of the VCIP award had been used for OVA expenditures (three institutions showed no VCIP funds for OVA expenditures).

C. Required Services

The services that an institution is required to provide is conditional on the size of the institution (see definitions in Subsection IV.A). Institutions with small numbers of students and veterans are required to provide services only in the areas of recruitment and counseling, while the larger institutions are required to provide services in outreach, and special education as well. Institutional size was determined from information on the tape as previously described (Subsection IV.A). Availability of services was determined primarily from the coded information abstracted from the paragraph narrative reports[22]; however, other related data from the VCIP data tape were used for verification where possible.

In total, eigteen institutions, less than 5 percent of the sample, failed to report one or more of the required services. Among the 26 small institutions, one (4 percent) failed to report provision of recruitment or counseling, and 17 (5 percent) of the 374 large institutions failed to report one or more of the four required services. No recruitment activities were reported by four (1 percent) of the institutions. Moreover, these same institutions reported no part- or full-time recruiters and no recruitment expenditures as reflected by the VCIP data tape. Counseling services were not reported by six institutions (1.5 percent). Three of these six institutions, however, did report funding part-time counselors; otherwise the remaining three institutions did not report funding counseling or employing part-time or full-time counselors.

Outreach services were not reported by 13 of the 17 institutions required to provide those activities; however, three of these institutions did report part-time outreach workers and funds expended for outreach. The remaining 10 institutions made no mention, on any of the USOE forms, of outreach services. Special education services were not reported by 7 institutions required to provide such services.

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[22] Recall that the coded information was based on any statement or indication of a particular service as reported by the institution on OE Form 269-2. As such, these indices only reveal those services that happened to have been reported in response to the items in the POR. Institutions were not required to report directly if they provided or did not provide the required services (see Chapter 1, Section III.C), and it is quite possible that some institutions only failed to report the available services to veterans since they were not required to do so.

Four of the 18 institutions reported none of the required services. These institutions made no reference to any of the required services in terms of services available, coordination of services, direct participation, professional assistance available, responsibilities or problems, as reported on OE Form 269-2. Two of these institutions reported no OVA personal services offered in the required areas, on any USOE form, either in number of staff employed or in total funds expended for personnel services.

D. Summary

The available data suggest that approximately five percent of the VCIP institutions in the sample fail to meet the basic program requirement in the areas of staffing, expenditure of funds, or service offering. With an associated standard error of approximately 1 percentage point, this further indicates a 95 percent confidence that the percentage of all institutions receiving VCIP funds but not meeting one of these three basic requirement is between 3 percent and 7 percent.

On initial examination, this figure seems somewhat excessive; however, there are several factors that could contribute to an inflated figure. It should be emphasized that the data that were analyzed resulted from unverified reports of the various institutions. Moreover, there is considerable evidence (see Chapter 2, Section IV) that the data obtained from the institutional reports is far from completely reliable and that the particular form of unreliability would introduce overestimates of the number of institutions not meeting the three basic requirements.[23] Even in the reported results, there is indication of conflicting data (e.g., no observed report of counseling services in the paragraph narratives but indication elsewhere that counselors were hired and that funds were expended for counseling services).

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[23] Specifically, no differentiation was possible in the coded data between a true zero value for expenditures and/or staffing and a simple nonresponse to the items of the reporting form. Further, the reliability of the information obtained from the coding of paragraph narratives was quite questionable.

Thus, the obtained results may reflect inadequacies in reporting and/or data representation rather than failure to meet regulatory requirements. In light of the nature of many of the forms that were examined and the indicated lack of reliability in the coding of paragraph narratives, the obtained five percent figure is considered to be well within the limits of expected data error. Therefore, these results, while suggestive of possible noncompliance on the part of some institutions, should be interpreted with considerable caution in the absence of further verification of their validity.

V. TOWARD AN INSTITUTIONAL TYPOLOGY FOR OVA PROGRAM PURPOSES: CONJECTURES ON UNDERLYING FORCES FORMING THE CLUSTERS

Applying factor analytic methods to reduce data and subsequently obtain clusters of institutions and/or programs is a technique more tuned to parsimony and organization of data already known than to discovery and identification of all underlying structural variables. One can obtain from such a process only a reorganization of what is put into it; and, in the current instance, there was considerable handicap from using two kinds of readily available data rather than a thoughtful and well-planned formulation of program-relevant variables collected under a standardized procedure.

These limitations notwithstanding, the differences among the clusters suggest strongly that some qualities of the host institutions affect in dramatic ways the kind of OVA program that can be operationalized. There is a frequent suggestion in the data that some minimum number (not determinable in this study) of veterans and staff is necessary before any program of substance can be formed. More importantly, it may be inferred that some institutions are cordial to support functions, and some are hostile (probably as a matter of traditional academic emphases and a self selected or purposely selected study body that can sustain these emphases). In the favorable instance, an OVA function can rely on existing support climates, or bask in augmenting that support; in the unfavorable instance, academic support activities may be locally interpretable only as undesirable or inappropriate (for the institution). It may be suspected, too, that in some instances the characteristics of the veteran student population differ from those of the traditional clientele of the college and/or that, given recruiting emphases, some institutions may nevertheless attract veteran students atypical in various ways from the traditional clientele.

There is also evidence in the variables on which the clusters differ that there are qualitative or content differences in the OVA programs that must be related not only to what can thrive in a particular institutional context but also to regulations that permit restricted programs in restricted settings and broader services in larger settings. Background, interests, and competencies that the OVA coordinators and staff possess may also dramatically affect the nature and content of the programs. Some of the clusters differ principally in whether a vigorous or a pro forma type of OVA operation has been installed. This may, of course, reflect reports perfunctorily completed rather than services perfunctorily performed, but it is not unreasonable to suspect that some OVA operations simply fill offices and keep desk chairs warm during office hours, while others focus on personalized attention to individual veterans and still others focus on academic and support service colleagues to assure equal time and attention to veterans. The clarity of these different programmatic styles would be improved if the forms providing the paragraph narratives utilized for many program indices had been more highly structured. For example, a paragraph job description for each staff member or uniform response to time devoted to a structured list of functions would have been helpful in this regard.

In summary, the data suggest that such characteristics as the following may color and influence strongly the content and flavor of the OVA operation: institutional size and number of veterans (the latter of which is closely related to the available VCIP funds); and institutional climate with particular regard to whether academic programs and courses are directed to a select or "elite" group or whether the prevailing philosophy is to take the student where he/she is and tailor content and level to his/her needs. If the institution already has a remedial emphasis, OVA activities in this regard may be superfluous; if the institution is hostile to assistance activities, remedial work through the OVA may find a harsh environment. Recruitment is a different proposition for a nonresidential college serving a small geographic area, than for a college drawing from a regional or national sending area. Where costs are modest, financial advisement may be less frequently relevant. Moreover, program flavors can vary not only as a function of what can thrive in a particular institutional climate but also as a matter of who and what the OVA coordinator and staff may be. One implication is that a discrete list of evaluation criteria may not be uniformly applicable, or that best adaptation of program to prevailing students and need will generate multiple model programs.

In this context it should be noted that from the surface dimensions revealed by the current approach, a deeper underlying structure may be inferred. For example, Clusters A, B, I, and J all represent small institutions with relatively small enrollments of veterans; Clusters B and J also represent institutions with high per capita instructional costs and (probably) climates hostile to academic support; what OVA programs in Cluster B institutions do, however, seems to be more active and focused than the apparently more laissez-faire posture of OVA programs in Cluster J institutions. Clusters A and I, on the other hand, appear to represent small institutions with more of a service orientation than the academic orientation of Cluster B and J institutions. Again the distinguishing characteristic is active (Cluster A) versus passive (Cluster I) OVA programs. Fundamental underlying dimensions for these clusters, similar on the institutional size dimensions, appear to be (1) academic orientation of campus, and (2) OVA program quality.

Clusters E, H, K, and L are each entirely or nearly all public institutions; Cluster E is comprised of predominantly large universities, and Cluster L represents predominantly large 2-year colleges, while Clusters H and K tend to represent, proportionally, the academic levels of the total group. Only Cluster H does not contain a preponderance of large institutions. Clusters E and L do not differ significantly in the extent of emphasis the OVA office must place on academic support, given what a large university (Cluster E) or a large community college (Cluster L) would already provide intrinsically in this regard; the OVA operations are large, well-established, and self-sufficient. Cluster H contains schools with smaller numbers of veterans, and OVA functions appear to be scaled accordingly, while OVA programs in Cluster K (institutions also, like Clusters E and L, with large numbers of veterans) appear to be more like Cluster E and L OVA programs. In short, the underlying and fundamental structured differences for these four, similar on the public versus private dimension, appear to be (1) size and (2) academic level of institution, rather than OVA program quality.

Of the four remaining clusters, Cluster G is characterized by the large 4-year institutions where large numbers of veterans can justify well-supported programs; Cluster F is distinctive principally as a group of mid-size institutions. Clusters C and D differ from the other clusters principally in content or emphases of OVA programs, where now the underlying dimensions appear to be such matters as high (Cluster D) or low (Cluster C) recruiting and outreach activities, or tutoring (Cluster D) or counseling (Cluster C) activities.

While these results are illuminating, and perhaps more reasonable than should be expected from enlisted rather than prescribed data, the strong suggestion is that institutional, and program factors interact, and that such matters as different characteristic student body needs or different academic climates may also be important in describing what the programs are or should be like. Program evaluation would then proceed with these relationships known, but until then the question of a best program solution for particular institutional or program context cannot be satisfactorily answered.

Chapter 4

Summary and Conclusions

I. BACKGROUND, PURPOSE, AND METHODOLOGY

A. Background

The Veteran's Cost-of-Instruction Program, (VCIP) is directed by the U.S. Office of Education (USOE) and is intended to provide improved and expanded postsecondary education services to veterans (Title X, Section 420, P.L. 92-318, as amended by P.L. 93-380). Postsecondary institutions accepting a VCIP award are committed to spend at least 75 percent of the award funds to: (1) establish a full-time Office of Veterans Affairs (OVA) that is adequate, accessible, and visible; (2) employ at least one full-time staff member whose only institutional responsibility is to veterans; and (3) provide services in recruitment, counseling, special education programs, and "outreach". The Veterans' Program Branch of USOE provides the VCIP awards to the institution on the basis of the number of full-time-equivalent undergraduate veterans enrolled receiving vocational-rehabilitation or general educational assistance benefits.

For program year 1975-76, 1,206 institutions were funded by the VCIP. The total dollar appropriation for the year was $31,250,000 for a total formula request of $264,388,312. A total of 845,642 full-time-equivalent Category I veterans (those veterans who are receiving benefits under Chapter 31 and Chapter 34, Title 38, United States Code) and 71,304 full-time-equivalent Category II veterans (those veterans who are currently receiving or have received benefits for tutorial assistance under Sub-chapter V of Chapter 34, Section 1692, and those individuals who have received benefits under Sub-chapter V and VI of Chapter 34, Sections 1691 and 1696, Title 38, United States Code) were reported for VCIP award calculations. For qualification and award purposes, institutions report only those veterans who are enrolled at least half-time and who are receiving vocational education or general educational assistance benefits, even though the OVAs offer services to all veterans.

B. Purpose

The primary purpose of this evaluation was to develop profiles describing institutional services for veterans, the Office of Veterans' Affairs, and demographic characteristics; and to identify differences and similarities in institutions' veteran assistance programs. Other purposes were to describe the degree to which institutions meet the major criteria listed in the regulations, and to develop a standardized method for category and variable identification from narrative Program Operations Reports.

C. Methodology

A sample of 400 VCIP projects funded in academic year 1975-76 were selected using a systematic stratified selection procedure. The raw data to be examined were obtained from four USOE forms (USOE Forms 269, 269-1, 269-2, and 269-3). The forms consisted of objective and subjective program descriptive information and provided an existing data base along with the USOE Student Financial Aid Master File.

Several different strategies were used to prepare the data for analysis. First a content analysis was undertaken to reduce narrative responses to quantifiable data. The process included category and variable identification on OE Form 269-2, development of a standardized categorization manual to be used during the evaluation coding task, and subsequent quantification procedures. Second, the variables selected from VCIP project records maintained by the USOE Veterans' Program Branch were reduced to aggregate or composite variables, and the variables were grouped into conceptually similar variable sets. Next, factor analytic techniques were employed to further reduce the data elements.

Although some quality problems were detected in the existing objective information, such problems were considered to be within acceptable tolerance levels; however, some bias may have been introduced into the findings due to a general inability to distinguish between missing data and "true" zero values. On the other hand, the reliability of data abstracted from the paragraph narratives was quite suspect and the possibility of bias in these data was considerable. Thus, results of analyses based upon these more subjective data should be interpreted with extreme care.

The major thrust of the evaluation was descriptive and focused on the VCIP projects as the unit of analysis. Interest was directed toward the commonalities and diversities existing among VCIP operations, either globally or in relation to stated program criteria. Analysis activities were directed to the identification of those variables that best defined similarities and differences among the VCIP projects and their host institutions. Imputation techniques were typically utilized to resolve the problem of missing data. A cluster analysis procedure isolated different groups or types of VCIP projects/ institutions. Profile analyses were then conducted to examine differences in program relevant variables between these clusters. All analyses were conducted with unweighted data.

D. Constraints and Limitations

It should be recognized that the existing data were not collected with detailed description or rigorous evaluation in mind. Information contained on the USOE forms reflects primarily VCIP funding data and may not consider actual veteran activities prior to the VCIP award. As a result, the items on the USOE forms did not always elicit information relevant to evaluation, nor did the existing information always provide a comprehensive picture of all activities and services available for veterans. Because a substanial portion of the data was obtained from paragraph narratives, there was no control over the inclusion of specific variables or over respondent's interpretation of the desired information. This, combined with the fact that the data provided by respondents was frequently ambiguous and overlapping, indicates the need for considerable caution in interpreting findings.

II. OVERVIEW OF FINDINGS

A. Characteristics of the OVA Programs

Program characteristics varied greatly among the sample of VCIP projects. Undergraduate veteran enrollment varied from 27 to 5,380 students with an average enrollment of 801 veteran students. The number of Category I veterans enrolled ranged from 16 to 3,924 students, and the number of Category II veterans ranged from zero to 1,389 students enrolled. The number of Category I and Category II veterans generally increased between April 1975 and February 1976.

Available funds and expenditures also varied substantially among VCIP projects. Total VCIP awards ranged from $4106 to $135,000. Reported institutional funds ranged from zero to $125,775. The average VCIP expenditure for staff salaries was $16,960, but ranged from less than $500 through more than $114,000. Similarly, the average for non-VCIP funds invested in staff salaries was $7252, but ranged from less than $100 through more than $95,000. This extreme range of funds was observed for other OVA expenditures and obligations as well. The average VCIP indirect expenditures for OVA staff was $4989, and ranged from less than $50 through more than $44,500. Non-VCIP funds for indirect service expenses varied even more from less than $50 through almost $71,000, and an average of $2670. The relationship of VCIP to non-VCIP funds appears to be more a matter of institutional preference and action or of reporting habits than of the amount of funds awarded or provided.

Staffing differences parallel the differences in total funds available, as expected, and show a similarly wide variation. The distribution of staff by function also varied considerably, particularly in the proportion of total staff devoted to counselors, outreach workers, coordinators, and secretarial support. For example, although the mean number of full-time-equivalent (FTE) counselors was slightly less than one half-time person, some projects reported as many as 6.75 FTE counselors.

B. Characteristics of the Institutional Clusters

Twelve clusters of similar institutions and OVA programs were formed on the basis of available data. The resulting clusters may be described briefly as follows:

> Cluster A: The Small Student-Oriented Institutions. OVA activities in these 56 institutions appear to be shaped substantially by the extant small institution climate and the natural emphasis in this environment for effective teaching. Academic problems of veterans are served by learning laboratories or curricular devices in the college, rather than by such general support mechanisms as counseling or tutoring in the OVA services. Management-coordination-liaison functions appear minimal, with OVA energies directed toward providing personalized services to the student as an individual, and toward mobilizing other regular college services to work for him.
>
> Cluster B: The Little Academes. Although this cluster of 23 institutions, like Cluster A, contains essentially small institutions serving lower numbers of veterans, the host institutions are distinguished by high-cost and apparently more traditional academic programs. Their OVA offices have a business-like atmosphere, and focus on resolving personal, financial, and career problems. Remediation, as a general or specific instructional support, is either not needed or perceived as generally inappropriate.

Cluster C: The Basic Services OVA Institutions. While representing the range of institutions in size, these 70 colleges and universities also serve relatively small numbers of veterans, and invest minimal funds of their own (as opposed to VCIP funds) in OVA affairs. Outreach and recruitment activities are limited; OVA staff spend significant time interacting with the VA, and in counseling students on personal and academic (not job or career) problems. OVAs appear to be imposed or adjunct, rather than integral and mainstream, activities in the total institutional climates.

Cluster D: The Promotor OVA Institutions. This cluster of 43 institutions is distinguished by high emphasis on recruiting, outreach, and basic services activities. Academic support is marked by specific tutoring rather than general counseling support. The OVA offices here (1) bring in the veterans, (2) see that they have specific instructional support in particular subject matter areas, and (3) spend much time interacting with the VA on their behalf.

Cluster E: The Big Public Institutions. This cluster of 15 institutions appears to be distinguished first by institutional factors (e.g., there is a majority of large public universities, and a minority of large public community colleges), than by some distinct OVA functioning factors. OVA activities are well supported by VCIP and institutional funds. Staff devote significant time to basic OVA and general remedial services, and to personal, academic, and vocational counseling; mass recruiting approaches are employed. The data suggest that the institutions are too large and complex to coordinate service activities; OVA offices have the critical mass of staff to provide self-contained and specialized services to veterans, though with more emphasis on the programs for individuals than on individuals.

Cluster F: The Management Oriented OVA Institutions. This cluster of 38 institutions is distinguished by management and administration oriented OVA offices serving large numbers of veterans on mid-size (2500 to 8000 students) public campuses, the majority of which are 2-year colleges. Interaction with other campus support services tends to be high, as is emphasis on recruiting. Personal, academic, and vocational counseling functions are also stressed.

Cluster G: The Well-Developed OVA Institutions. A small cluster of 9 institutions with heavier representation of 4-year colleges than the other clusters, this group is distinguished by well-developed OVA programs, with more than modal emphasis on a host of OVA functions: development of special education programs, counseling, recruitment. Staffing is relatively large, and staff functions are highly specialized; the institutional environments appear cordial and supportive.

Cluster H: The Large OVA Public Institutions. Although all but one of the 30 institutions in this cluster are publicly controlled, the unique aspects appear to be more in terms of style of OVA functioning. Relatively large staffs serve relatively small numbers of veterans, with an emphasis on general counseling and general management of veterans' affairs, rather than well-developed and highly specific services.

Cluster I: The Minimal OVA Service Institutions. This cluster of 63 institutions, the largest among the clusters and with the heaviest proportion (25%) of privately controlled colleges, is distinguished from the others principally in terms of OVA programs about which not much could be said or was said concerning particular programatic emphases. Funding levels, from Federal and institutional sources, are modest, as are the numbers of veterans served.

Cluster J: The Minimal OVA Service Elites. This cluster of 21 institutions appears to be unique among the other clusters both in terms of little said or to be said about OVA functioning, and in terms of the institutional climate, featuring heavier proportions of private and/or high instructional cost colleges and universities.

Cluster K: The Public Service Institutions. A small cluster (9 institutions) of large but low cost institutions, this group appears to stand out from the others in that both the institutions and their well-staffed OVA programs serve to place prime emphasis on serving the general public's needs and interests. OVA basic services, particularly the more programatic ones (remediation, financial assistance, career decisions) are stressed.

Cluster L: The Urban Community Colleges. All but one of this cluster of 13 large public institutions are two-year colleges. OVA and other institutional emphases are on recruitment, remediation, and service, and on the management and liaison activities useful in integrating similar values reflected by the instructional programs and the typical OVA functions.

From the characteristics of these clusters, it may be concluded that programs may vary, first, as a function of the particular institutional context in which they operate; yet, these contexts are only partially described by such categories as level of academic offering, control, or size. More important may be such related matters as the numbers of veterans available on the campus to be served (which drives the mass of staff and services that can be supported), or the academic climate of the institution (which drives the need for and acceptability of instructional support services). Recruiting, a basic and integral part of the VCIP program, is justifiable in its own right as a program function, but the data suggest strongly that some institutions (the community colleges, for example) have an easier outreach proposition since their target area is well-defined and within commuting distance and since their traditional service population is similar to a large proportion of veterans on a number of academically relevant variables (e.g., scholastic ability, vocational/curricular aspiration, etc.). Financial counseling can assume major importance for high cost institutions that accept or attract veterans from other than moderately affluent backgrounds. Institutions that provide no remedial services but have veterans needing such services place a greater remedial burden on the OVA to provide this necessary support.

Beyond these institutional factors, however, the data strongly suggest that sharp qualitative or stylistic differences in OVA program operation exist that may be a function of the background, commitment, and particular skills of the OVA director or coordinator and the OVA staff. Some programs appear only to exist and be available for whoever might walk through the office door, while others appear to strive toward creative, energetic, and interactive provision of what veterans on the campus may need. Stated another way, there is the suggestion in the data that some OVAs passively or routinely offer the required services, while others actively and energetically provide these services and whatever else may be needed by veterans in that context. The data sources employed, however, would need to be better structured and sharpened to serve as a basis for any substantative qualitative evaluation of the impact and consequences of the OVA programs.

C. Cluster Profile Differences

Differences among the patterns of certain variables (veteran enrollment patterns, expenditure patterns, staffing patterns) were examined through multivariate profile analysis. Tests for parallelism (whether or not the group profiles have similar shapes) showed significant differences for each of the variable patterns examined, indicating that the cluster patterns differed significantly from one another when considered simultaneously. Tests for level (whether or not the average of all variables is the same for all groups) showed significant differences between clusters for each of the variable patterns considered. Tests for flatness (whether or not the combined group averages for the individual variables defined a straight line with zero slope) indicated significant differences from a slope equal to zero for all three variable patterns. These findings are in basic agreement with the findings which characterize the institutional clusters, yet the profile results provide additional insight into the nature of these cluster differences.

Minor veteran enrollment pattern differences existed between clusters in terms of enrollment over time, and even greater differences existed in the types of veterans enrolled (Category I or Category II). It appears, however, that the major differences among clusters were in the level (total number) of veteran students enrolled on campus.

Clusters differed somewhat in the pattern with which they allocate their funds to various line item expenses. Allocation pattern differences also existed between types of funds expended, but for this area also the level of total expenditures seems to be the dominant factor in differentiating between clusters (differences in total expenditure should reflect rather closely differences in numbers of veterans enrolled). Such differences should reflect, at least probabilistically, differences in program operation, since greater availability of funds allows greater diversity in the types of services that can be offered to veterans.

Staffing patterns appear to assume a dominant role in defining clusters, whether considering the number of FTE personnel staffing OVA positions or expenses within the staff positions. There are differences among clusters in total level of staffing, and these differences are closely related to personnel services expenditure allocation differences among the clusters, and to total award. To the extent that different staffing patterns reflect basic programmatic differences in the operation of the OVA's, these findings suggest that the clustering was effective in capturing such programmatic differences among institutions.

D. Extent to Which Projects Meet VCIP Basic Requirements

Three major VCIP requirements state that institutions (1) employ as OVA coordinator at least one full-time staff member whose service is to veterans; (2) insure that not less than 75 percent of VCIP funds awarded be used by the OVA to implement required services; and (3) provide required services to veterans in recruitment, counseling, special education, and outreach.

The available data indicate that approximately 95 percent of the VCIP funded institutions in the sample reported meeting the basic program requirements in the area of staffing, expenditures of funds, or service to veterans. It should be emphasized that the data used for these analyses resulted from unverified reports, and that the data, particularly the open-ended data used to examine required service to veterans, was not always available, nor was the coding process considered very reliable.

The obtained result may reflect inadequacies in reporting and/or data representation rather than failure to meet regulatory requirements. The data should not, therefore, be interpreted in terms of institutional compliance to regulations, but instead as reported evidence that institutions do meet basic VCIP requirements.

III. GENERAL CONCLUSIONS

A. Factors Affecting VCIP Project Operations

The data and analyses strongly suggest that a number of factors affect the climate, contents, and operating strategies of the VCIP projects. One would suspect that many OVA program differences found on the individual campuses are a function of the professional values, interests, and prior experiences of the VCIP directors and coordinators: for example, some come from management/administrative backgrounds, others from counseling or instructional support backgrounds. Some offices serve as energetic advocates, while others serve in a pro forma way those who walk in the door.

Of greater interest, however, is the strong suggestion in the data that institutional factors play an important role in how the VCIP projects actually function. One important factor is the degree to which the institution is concerned generally with academic and non-academic support of its student constituencies. Some programs find, apparently, little support for their service and assistance activities; others find themselves in climates cordial to their goals of assistance. Still others find they can serve veterans better by capitalizing on other support services already in place, than by generating these services themselves.

A second factor that may be inferred is that student veteran populations differ from campus to campus in what they need. This may be a matter of affluence, or ability to meet costs of tuition without unusual assistance; and/or, it may be a matter of general scholastic ability, with high ability veterans gravitating to some campuses and low ability veterans to others. Again, this aspect seems to flavor the style and content of the VCIP projects.

In short: emphases on particular services, and how these may best be made available, will vary as a function of the host institutional climate and the particular portions of veteran students that institution selects or attracts. While there is no reliable information available from the present evaluation to challenge any of the program guidelines, what constitutes a maximally effective service on one campus may contain elements not particularly appropriate on another. Program effectiveness must be viewed in the broader context of numbers of veterans, their characteristics, the other resources of the institution, and the general academic climate, as well as the particular energies, interests, and capability of the VCIP staff.

B. Methodological Findings

In an important sense, the study may be viewed as a test of what descriptive and evaluative payload may be carried by the routine monitoring and reporting documents maintained by USOE program offices. It is safe to conclude that on one hand a fairly good descriptive picture of some aspects of the VCIP projects and institutions emerged from the exercise in the current investigation. The picture is also reasonably clear as to what the underlying differences (or structure) of the VCIP projects might be. Yet, as an assessment device for evaluating particular programs or groups of programs, records would need considerable sharpening, through greater specificity as to what VCIP project coordinators must report, and with careful attention to the reliability of the procedures for categorizing their reports.

The relatively unstructured nature of the POR item stems, coupled with the extremely low reliability of rating the paragraph narratives suggest that considerable difficulty may be encountered in any future use of the Coder's Guide/Standardized Categorization Manual. Discounting those indices for which reliabilities were zero or near zero (which would not be satisfactorily reliable with any reasonable number of raters), seven raters, on the average, would be needed to obtain item reliabilities of .80 or greater. In light of the cost involved for such an operation and considering the utility of the majority of the data that could be extracted, such a procedure would not appear to be particularly cost effective.

While data elements from other USOE forms used to monitor the VCIP program have greater promise, these data also present evaluation problems in their current form. The failure, at time of data entry, to differentiate between true zeros and missing values introduces an unnecessary source of error into the data. Beyond this difficulty, additional (and careful) editing of the entire resulting data file for common errors (out-of-range, inconsistencies) should also prove beneficial for any further use of the data.

Appendix A

Composite Variable List and Data Source

Appendix A

Composite Variable List and Data Source

		Variable Description	Analysis File Variable Number	Data Source
	1.	Highest offering	V4	OE Form 269
	2.	Institution type	V5	OE Form 269
	3.	Total VCIP funds	V27	SFAMF*
	4.	Non-VCIP funds	V28	SFAMF
A.	Variable set one - Institutional demographic characteristics			
	5.	Region	V3	SFAMF
	6.	Type accreditation	V18	OE Form 269
	7.	Total undergraduate enrollment	V19	OE Form 269-3
	8.	Undergraduate veterans enrolled	V20	OE Form 269-3
	9.	Average annual per capita instructional expenditures	V16	OE Form 269
	10.	Planned per capita instructional expenditures	V17	OE Form 269
B.	Variable set two - VCIP resource level			
	11.	Application status	V11	OE Form 269
	12.	FTE Category 1 veterans	V12	VCIP data tape
	13.	FTE Category 2 veterans	V13	VCIP data tape
	14.	Number of Category 1 veterans (April)	V21	OE Form 269-3
	15.	Number of Category 2 veterans (April)	V22	OE Form 269-3
	16.	Number of Category 1 veterans (Oct)	V23	OE Form 269-3
	17.	Number of Category 2 veterans (Oct)	V24	OE Form 269-3
	18.	Number of Category 1 veterans (Feb)	V25	OE Form 269-3
	19.	Number of Category 2 veterans (Feb)	V26	OE Form 269-3
C.	Variable set three - OVA expenditures and obligations			
	20.	Funds from VCIP for personal services	V31	SFAMF
	21.	Non VCIP funds for personal services	V32	↓
	22.	Funds from VCIP for employee benefits	V34	
	23.	Non VCIP funds for employee benefits	V35	
	24.	Funds from VCIP for workshop/conferences	V37	
	25.	Non VCIP funds for workshop/conferences	V38	
	26.	Funds from VCIP for travel	V40	

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* SFAMF-The Student Financial Aid Master File, as reflected in entries on the VCIP data tape.

	Variable Description	Analysis File Variable Number	Data Source
27.	Non VCIP funds for travel	V41	SFAMF
28.	Funds from VCIP for equipment purchases	V43	
29.	Non VCIP funds for equipment purchases	V44	
30.	Funds from VCIP for supplies	V46	
31.	Non VCIP funds for supplies	V47	
32.	Total VCIP funds for OVA expenditures	V52	
33.	Total non VCIP funds for OVA expenditures	V53	
34.	Institutional share	V57	
35.	Balance	V59	
D.	Variable set four - OVA personal services offered		
36.	Number of full-time OVA persons	V61	
37.	Number of FTE OVA persons	V63	
38.	VCIP funds for OVA persons	V64	
39.	Total funds for OVA persons	V66	
40.	Number of full-time coordinators	V67	
41.	Number of FTE coordinators	V69	
42.	VCIP funds for coordinators	V70	
43.	Total funds for coordinators	V72	
44.	Number of full-time counselors	V73	
45.	Number of FTE counselors	V75	
46.	VCIP funds for counselors	V76	
47.	Total funds for counselor	V78	
48.	Number of full-time outreach workers	V79	
49.	Number of FTE outreach workers	V81	
50.	VCIP funds for outreach workers	V82	
51.	Total funds for outreach workers	V84	
52.	Number of full-time recruiters	V85	
53.	Number of FTE recruiters	V87	
54.	VCIP funds for recruiters	V88	
55.	Total funds for recruiters	V90	
56.	Number of full-time secretaries	V91	
57.	Number of FTE secretaries	V93	
58.	VCIP funds for secretaries	V94	
59.	Total funds for secretaries	V96	

	Variable Description	Analysis File Variable Number	Data Source
60.	Number of full-time clerks	V97	SFAMF
61.	Number of FTE clerks	V99	
62.	VCIP funds for clerks	V100	
63.	Total funds for clerks	V102	
64.	Total number of full-time personnel	V103	
65.	Total number of FTE personnel	V105	
66.	Total VCIP funds for OVA personnel	V106	
67.	Total funds for OVA Personnel	V108	

VCIP Services and Procedures (Content Analysis Data: Analysis Variables)

E. Variable set five - Outreach and recruitment

	Variable Description	Analysis File Variable Number	Data Source
68.	Formal needs survey	V110	Content Analysis
69.	Personal contact with Walkins	V113	
70.	Meetings, records, and other agency contacts	V111,V112,V114-V117,V120-V122	
71.	OVA contacts in the field	V118,V119	
72.	Consult veterans services	V123	
73.	General procedures for veterans	V124-V126	
74.	Flyers and letters	V128,V129	
75.	Combination of media and special events	V130-V132	
76.	Means of identification	V134-V144	
77.	Publications, pamphlets, and gimmicks	V147,V150,V151 V153-V155	
78.	Local newspaper	V148	
79.	Outdoor advertising	V149	
80.	Radio and/or TV	V152	
81.	Personal appearance at strategic locations	V158	
82.	Letters	V163	
83.	Personal contacts	V165	
84.	Direct contact with schools and agencies	V156,V157, V159-V162,V164	
85.	Recruitment success	V168-V172	
86.	Positive outcomes	V173-V175,V177	
87.	Recruitment difficulties	V180-V189	

	Variable Description	Analysis File Variable Number	Data Source
F.	Variable set six - Available services		
88.	Coordination of special education	V191	Content Analysis
89.	General remedial services	V194	
90.	Mathematics remedial courses	V195	
91.	English remedial courses	V196	
92.	Reading remedial courses	V197	
93.	Academic study skills	V198,V199, V202,V212	
94.	GED, ABE	V200,V201	
95.	Motivational services	V203-V206,V209, V211,V213	
96.	Tutorial services	V207,V210	
97.	Study centers	V208	
G.	Variable set seven - Professional assistance available		
98.	Personal counseling	V225	
99.	Family counseling	V226	
100.	Career counseling	V227	
101.	Educational counseling	V228	
102.	Financial counseling	V229	
103.	General counseling	V224,V230-V232, V234	
104.	Job placement	V233	
105.	Coordination of counseling services	V236	
106.	Number of veterans receiving services or referred	V238, V242	
H.	Variable set eight - Problems and resolutions		
107.	VA Related problems	V246-V258 (Even # only)	
108.	VA Related resolutions	V247-V259 (Odd # only)	
109.	OVA Related problems	V260-V276 (Even # only)	
110.	OVA Related resolutions	V261-V277 (Odd # only)	
111.	Other problems	V278,V280,V282, V284,V285	
112.	Other resolutions	V279,V281,V283	

	Variable Description	Analysis File Variable Number	Data Source
113.	OVA Office and staff	V332-V335	Content Analysis
114.	Qualities of OVA	V336-V340	
115.	Outside agencies	V342-V346	
116.	OVA basic services	V347-V353	
I.	Variable set nine - Coordinator's qualifications and responsibilities		
117.	Educational level	V287	
118.	Public relations or military orientation	V290,V293-V295	
119.	Management-administrative experience	V291	
120.	Guidance or counseling experience	V292	
121.	Veteran status	V297	
122.	Outreach, recruitment responsibilities	V300,V301	
123.	Counseling responsibilities	V302	
124.	Teaching or tutoring responsibilities	V303-V309	
125.	General supervision responsibilities	V310,V311, V315,V318	
126.	Recruitment supervision	V312	
127.	Direct outreach efforts	V313	
128.	Establish special education programs	V314	
129.	Counseling functions	V316,V317	
130.	Communication functions	V319-V321, V324,V325	
131.	Liaison activities	V322,V323	
132.	Plan and implement program	V326	
133.	Program management	V327	
134.	Coordinate services	V328,V329	

Appendix B

USOE Forms

OE Form

269

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

VETERANS' COST-OF-INSTRUCTION PAYMENTS TO INSTITUTIONS OF HIGHER EDUCATION

Section 420 of the Higher Education Act of 1965, as amended by Title X of Public Law 92-318

APPLICATION FOR THE ACADEMIC YEAR 1975-76

FORM APPROVED
OMB NO. 51-R1021

1. APPLICATION *(check one)* ☐ INITIAL ☐ RENEWAL

2. TYPE OF APPLICATION *(check one)* ☐ INDIVIDUAL INSTITUTION ☐ CONSORTIUM

PART I - APPLICATION DATA

3a. NAME OF INSTITUTION OF HIGHER EDUCATION OR OF CONSORTIUM

4. ADDRESS *(number, street, city, State, and ZIP code)*

5. CONGRESSIONAL DISTRICT

3b. EIN NO. ▨☐☐☐☐☐☐☐☐☐▨▨

6a. TYPE OF INSTITUTION *(Support)* ☐ PUBLIC ☐ PRIVATE

6b. HIGHEST LEVEL OF EDUCATIONAL OFFERING ☐ TWO YEAR ☐ FOUR YEAR ☐ FOUR YEAR PLUS

7. INSTITUTIONAL UNIT ☐ SINGLE CAMPUS ☐ MULTI-CAMPUS INSTITUTION ☐ BRANCH CAMPUS

Ⓐ	8. TOTAL UNDERGRADUATE STUDENT ENROLLMENT 4/16/75	9. ELIGIBLE UNDERGRADUATE VETERANS ENROLLED	▨	11. ELIGIBLE VETERANS ENROLLED 4/16/74	▨	▨	▨	15. ITEM 9 ÷ BY ITEM 11
Ⓑ	8. TOTAL UNDERGRADUATE STUDENT ENROLLMENT, 4/16/75	9. ELIGIBLE UNDERGRADUATE VETERANS ENROLLED	10. TOTAL UNDERGRADUATE STUDENT ENROLLMENT 4/16/74	11. ELIGIBLE VETERANS ENROLLED 4/16/74	12. % OF VETERANS ENROLLED 4/16/74	▨	▨	15. ITEM 9 ÷ BY ITEM 8
Ⓒ	8. TOTAL UNDERGRADUATE STUDENT ENROLLMENT, 4/16/75	9. ELIGIBLE UNDERGRADUATE VETERANS ENROLLED	10. 1ST YR. OF FUNDING UNDER VCIP ☐ 1973 ☐ 1974	11. TOTAL UNDERGRADUATE ENROLLMENT 1ST YR. OF FUNDING	12. ELIGIBLE VETERANS BASE YR. *(Previous yr. to Item 10)*	13. +10%=	14. ELIGIBILITY FACTOR	15. ITEM 14 ÷ BY ITEM 9

16. VETERANS IN CATEGORY 1 *(See instructions)*

17. VETERANS IN CATEGORY 2 *(See instructions)*

18. AVERAGE ANNUAL PER CAPITA THREE-YEAR INSTRUCTIONAL EXPENDITURES FOR ACADEMIC YRS. 1972-73, 1973-74, & 1974-75

19. PLANNED PER CAPITA INSTRUCTIONAL EXPENDITURES FOR ACADEMIC YEAR 1975-76

20. TYPE OF ACCREDITATION *(Check one)*
a. ☐ FULLY ACCREDITED b. ☐ CORRESPONDENCE STATUS c. ☐ THREE LETTER APPROVAL

21. NAME OF REGIONAL/NATIONAL ACCREDITING ORGANIZATION

PART II - ASSURANCES

The assurances to be given by each individual applicant institution and each institutional member of a consortium are as follows:

1. Any funds received by the institution with respect to this application which are not required, pursuant to applicable law and regulations, to be used for providing veterans' services will be used solely to defray instructional expenses in academically related programs, as that term is defined by regulation.
2. The institution will expend during the academic year ending June 30, 1975 for all academically related programs of the institution, a per capita amount equal to at least the average amount so expended during the three academic years preceding the academic year ending June 30, 1974.
3. The institution will provide adequate veteran's services as provided for in the applicable law and regulations.
4. Any funds received by the institution with respect to this application will not be used for a school or department of divinity or for any religious worship or sectarian activity.
5. The data presented in the application above are verifiable and auditable.
6. All veterans included in the data above will have ready access to the services provided by the VCIP award.
7. The institution will comply with all other applicable laws and regulations respecting funds awarded pursuant to this application.

PART III - AUTHORIZATIONS

FISCAL OFFICER'S SIGNATURE FOR INDIVIDUAL INSTITUTION OR CONSORTIUM	22a. TYPE OR PRINT NAME AND TITLE OF FISCAL OFFICER	22b. TELEPHONE *(area code, number)*
	22c. SIGNATURE OF FISCAL OFFICER	22d. DATE
CERTIFICATION SIGNATURE FOR INDIVIDUAL INSTITUTION	23a. I HEREBY CERTIFY THAT ALL INFORMATION ENTERED IN PART I OF THIS APPLICATION IS TRUE TO THE BEST OF MY KNOWLEDGE AND I HEREBY GIVE THE ASSURANCES SET FORTH IN PART II OF THIS APPLICATION.	
	23b. TYPE OR PRINT NAME AND TITLE OF CHIEF ADMINISTRATIVE OFFICER	23c. TELEPHONE *(area code, number)*
	23d. SIGNATURE OF INSTITUTIONAL CHIEF ADMINISTRATIVE OFFICER	23e. DATE
CERTIFICATION SIGNATURE FOR CONSORTIUM PRIMARY REPRESENTATIVE	24a. I HEREBY CERTIFY THAT ALL INFORMATION PERTAINING TO THE CONSORTIUM I REPRESENT IS TRUE TO THE BEST OF MY KNOWLEDGE AND I HEREBY GIVE THE ASSURANCES REFERRED TO IN PART II OF THIS APPLICATION.	
	24b. TYPE OR PRINT NAME, TITLE AND BUSINESS ADDRESS OF CONSORTIUM REPRESENTATIVE	24c. TELEPHONE *(area code, number)*
	24d. SIGNATURE OF CONSORTIUM REPRESENTATIVE	24e. DATE

FOR OFFICE OF EDUCATION USE ONLY	AMOUNT APPROVED FOR PAYMENT $	COMMISSIONER'S APPROVAL *(signature)*	DATE

OE FORM 269, 3/75 REPLACES EDITION OF 3/74, WHICH IS OBSOLETE.

PART IV - CONSORTIUM AGREEMENT AND NARRATIVE

Institutions seeking assistance through a consortium agreement must complete the individual application and, in addition submit as Part IV a joint narrative statement which is to be attached to each of the three submitted copies of the application. Each member institution must have a total enrollment of less than 2,500 and enroll fewer than 70 veterans.

Statement is to be prepared in the following format:

SECTION A. JUSTIFICATION - Briefly explain why the institutions cannot feasibly provide the veterans' services required by the law and the regulations on an individual basis, and indicate the facts upon which it may by concluded that the institutions are located within a reasonable commuting distance of each other.

SECTION B. JOINT FUNCTIONS - Briefly specify the role of each institution and any other parties with respect to the veterans' services required by the law and the regulations, indicating how such services will be readily accessible to veterans attending, and to veterans in the community served by each of the institutions.

SECTION C. DESIGNATION OF AGENTS - Include a statement indicating that the consortium representative shall be the agent of each of the institutions with respect to funds administered by the consortium pursuant to this application.

CERTIFICATION - The Chief Administrative Office of each institution which is party to the consortium must sign and complete the Authorization, Part III.

PART I - APPLICATION DATA (complete all items)

ITEM 1. Check appropriate block. (a) Check "Initial" if applicant is making application to establish eligibility. (b) Check "Renewal" if applicant was previously declared eligible and can justify maintenance of eligibility by number entered in Item 15. A Renewal applicant includes any institution previously funded, whether they rejected the award, were eligible and then ineligible, or are now submitting an "individual" application after participating as a part of a district or a consortium.

ITEM 2. Check appropriate block. (a) Check "Individual Institution" if the applicant is a single institution of higher education as defined in Section 189.1 of the Regulations or a particular branch or campus of such institution which is geographically separated from the parent institution and is recognized as a separate administrative unit of the parent institution. (b) Check "Consortium Application" if the application is being made by two or more cooperating institutions pursuant to a consortium agreement as defined in Section 189.15 of the Regulations. Please note that only institutions with an enrollment of less than 2,500 students on April 16, 1975, may enter into a consortium agreement with one or more other such institutions.

ITEM 3a. Self-explanatory.

ITEM 3b. Enter the nine-digit Employer Identification Number assigned by the Internal Revenue Service which is used by your institution in its payroll operations. NOTE: If your institution has been assigned a DHEW entity number consisting of the IRS Employer ID Number prefixed by "1" and suffixed by a two-digit number, enter the full 12 place DHEW entity number.

ITEM 4. Self-explanatory.

ITEM 5. The correct Congressional District is vital. Please double check it.

ITEMS 6a. and 6b. Self-explanatory.

ITEM 7. Check appropriate block using the following definitions:

(a) "Single Campus." An institution consisting of a single or main campus, or the main campus (sometimes called parent institution) of a widely dispersed multi-campus institution.

(b) "Multi-Campus Institution." An organization bearing resemblance to an institutional system, but unequivocally designated as a single institution with either of two organizational structures: (1) an institution having two or more campuses responsible to a central administration which may or may not be located on one of the administratively equal campuses; or (2) an institution having a main campus with one or more branch campuses attached in close proximity to it;

(c) "Branch Campus." A campus of an institution of higher education which is organized on a relatively permanent basis (i.e., has a relatively permanent organization), which offers an organized program or programs of work of at least 2 years (as opposed to courses), and which is located in a community different from that in which its parent institution is located. Being in a community different from that of the parent institution also means that a branch is located beyond a reasonable commuting distance from the main campus of the parent institution.

OE Form

269-1

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

VETERANS' COST-OF-INSTRUCTION PAYMENTS TO INSTITUTIONS OF HIGHER EDUCATION

(Section 420 of the Higher Education Act of 1965, as amended by Title X of Public Law 92-318)

FORM APPROVED
O.M.B. NO. 51-R1043

1. FISCAL YEAR ENDING
June 30, 1976

2. TYPE OF AWARD *(Check one)*
☐ INDIVIDUAL INSTITUTION ☐ CONSORTIUM

FISCAL OPERATIONS REPORT

3a. NAME OF INSTITUTION OF HIGHER EDUCATION OR OF CONSORTIUM

3b. EIN NO.

4. ADDRESS *(Number, street, city, State, and ZIP code)*

5. CONGRESSIONAL DISTRICT

SECTION A. FEDERAL ALLOTMENT AND BUDGET CATEGORIES

6. TOTAL AMOUNT OF VETERANS' COST-OF-INSTRUCTION AWARD		7. AMOUNT CONTRIBUTED BY INSTITUTION *(Non-VCIP funds)*	$
a. ORIGINAL	$	8. AMOUNT OF AWARD USED BY INSTITUTION FOR INSTRUCTIONAL EXPENSES *(Institutional Share)*	$
b. ADJUSTMENTS	$		
c. NET AWARD	$	9. AMOUNT OF AWARD USED FOR OFFICE OF VETERANS' AFFAIRS	$

SECTION B. EXPENDITURES AND OBLIGATIONS FOR THE OFFICE OF VETERANS' AFFAIRS			FROM VETERANS' COST-OF-INSTRUCTION FUNDS (1)	FROM FUNDS CONTRIBUTED BY INSTITUTION (2)	TOTAL EXPENDITURES FOR THE OVA (3)
10. PERSONAL SERVICES *(Salaries)**			$	$	$
11. EMPLOYEE BENEFITS			$	$	$
12. WORKSHOPS/CONFERENCES			$	$	$
13. TRAVEL	a. PROFESSIONAL *(Per diem)*	$			
	b. RECRUITMENT AND OUTREACH	$	$	$	$
14. EQUIPMENT PURCHASES**			$	$	$
15. SUPPLIES			$	$	$
16. OTHER *(Specify below)*		TOTAL	$	$	$
a.			$	$	$
b.			$	$	$
c.			$	$	$
d.			$	$	$
e.			$	$	$
f.			$	$	$
		TOTAL	$	$	$

*Enter total of Columns 4, 5, and 6 of Section 3 in Columns 1, 2, and 3, Line 10 of Section B above.

**Attach inventory description, quantity, etc. of items having $300 or more unit value.

SECTION C. SUMMARY			COLUMN (1)	COLUMN (2)
17. NET AMOUNT OF VCIP AWARD *(See item 6c, above)*			$	▨
18. EXPENDITURES AND OBLIGATIONS FOR THE OVA	a. EXPENDITURES	$	TOTAL	▨
	b. OBLIGATIONS	$	$	▨
19. INSTITUTIONAL SHARE OF AWARD *(See item 8, above)*			$	▨
20. TOTAL EXPENDITURES FROM AWARD *(Sum of lines 18 and 19)*			▨	$
21. BALANCE *(Line 17-line 20)*			▨	$
22. AMOUNT DRAWN FROM NIH			$	▨

SECTION D. CERTIFICATION *(For individual institution award recipients only)*

I CERTIFY that all of the information contained herein is true, complete and correct to the best of my knowledge and belief.

23. TYPE NAME AND TITLE OF FISCAL OFFICER

25. TELEPHONE
AREA CODE | NUMBER | EXTENSION

24. SIGNATURE OF FISCAL OFFICER

26. DATE

OE FORM 269-1, 5/76 REPLACES OE FORM 269-1, 8/75, WHICH IS OBSOLETE

SECTION E. BREAKDOWN OF PERSONAL SERVICES *(SALARIES ONLY) (For each individual position listed, indicate number of full-time in Col-(1), number of part-time in Column (2a), part-time converted to full-time equivalent in Column (2b), and total staff in Column (3), Indicate compensation (salaries) by source in Column (4) (VCIP funds), institutional contributions, which may include CWSP or VA Work-Study funds (Column (5)), and total compensation (Column (6)). Enter the totals from Columns (4), (5), and (6) on Line 10, Columns (1), (2), and (3))*

OVA POSITION TITLES	NO. FULL-TIME (1)	(2) PART-TIME NUMBER (a)	(2) PART-TIME FTE (b)	TOTAL (Sum of Cols. (1) and (2b)) (3)	FEDERAL (VCIP) FUNDS* (4)	INSTITUTIONAL FUNDS* (5)	TOTAL FUNDS* (Sum of Columns (4) and (5)) (6)
1. THE OVA PERSON MAINTAINING FULL-TIME REQUIREMENT	1	▨	▨	1 00	$	$	$
2. COORDINATOR					$	$	$
3. COUNSELORS					$	$	$
4. OUTREACH WORKERS					$	$	$
5. RECRUITERS					$	$	$
6. SECRETARIES					$	$	$
7. CLERKS					$	$	$
8. OTHER *(Specify titles)*					$	$	$
a.					$	$	$
b.					$	$	$
TOTAL					$	$	$

SECTION F. CONSORTIUM *(If VCIP Award Recipient is a member of a consortium furnish information below for each institution. If extra columns are needed, attach a separate sheet with the information requested)*

	(1)	(2)	(3)	(4)
NAME OF EACH INSTITUTION IN CONSORTIUM *(Enter one in each column)*				
1. TOTAL AMOUNT OF VCIP AWARD: a. ORIGINAL	$	$	$	$
b. ADJUSTMENTS	$	$	$	$
c. NET AWARD	$	$	$	$
2. AMOUNT CONTRIBUTED BY EACH MEMBER *(Non-VCIP funds)*	$	$	$	$
3. AMOUNT OF AWARD USED BY EACH MEMBER FOR INSTRUCTIONAL EXPENSES *(Institutional Share)*	$	$	$	$
4. AMOUNT OF AWARD USED BY EACH MEMBER FOR OFFICE OF VETERANS' AFFAIRS	$	$	$	$

CONSORTIUM FISCAL OFFICER

5. TYPE OR PRINT NAME

6. TITLE

7. SIGNATURE

8. TELEPHONE — AREA CODE / NUMBER / EXTENSION

9. DATE

INSTITUTION SERVING AS FISCAL AGENT FOR CONSORTIUM

10. NAME OF INSTITUTION

11. ADDRESS *(Include ZIP code)*

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* Enter totals from Columns (4), (5), and (6) above on Line 10, Section B in Columns (1), (2), and (3))

INSTRUCTIONS FOR VETERANS' COST-OF-INSTRUCTION PAYMENTS TO INSTITUTIONS OF HIGHER EDUCATION – FISCAL OPERATIONS REPORT

FORM APPROVED
O.M.B. NO. 51-R

Section 189.33 of the Regulations specifies that "within 90 days of the expiration of the academic year for which such assistance was awarded," an institution or consortium shall submit "a full account of funds expended, obligated and remaining." For the 1975-76 Academic Year, the Fiscal Operations Report must be filed on or before September 30, 1976. Three copies, each with original signatures, should be sent to the U.S. Office of Education, Veterans' Programs Branch, ROB #3, Room 4613, 400 Maryland Avenue, SW., Washington, D.C. 20202.

Item 2. Check one block. "Individual Institution" means a single institution of higher education as defined in Section 189.1 of the Regulations or a particular branch or campus of such institution which is geographically separated from the parent institution and is recognized as a separate administrative unit of the parent institution. "Consortium" means an arrangement made by two or more cooperating institutions pursuant to a consortium agreement as defined in Section 189.15 of the Regulations. Consortium Institutions must provide COMPOSITE data for Sections A, B, C, and E.

Item 3a, 4, and 5. Self-explanatory. Provide ALL information requested.

Item 3b. Enter the nine-digit Employer Identification Number assigned by the Internal Revenue Service. If your institution has been assigned a DHEW entity number consisting of the IRS Employer ID Number prefixed by "1" and suffixed by a two-digit number, enter the full 12 place DHEW entity number.

Item 6. Enter the total amount of the Veterans' Cost-of-Instruction Payments (VCIP) Award as indicated on the Award Letter in 6a, Adjustments (deobligations), if any, to the original VCIP award should be entered in 6b. Net Award, 6c, is 6a minus 6b.

Item 7. Enter the amount, if any, contributed by the institution from institutional funds, EXCLUSIVE of any funds received under the VCIP program. This may include College Work-Study Program or VA Work-Study Contributions.

Item 8. Enter that amount of the VCIP Award expended for the academic/instructional program of the institution, other than for the Office of Veterans' Affairs, i.e., the "Institutional Share." "Institutional Share" is that amount not to exceed 50 percent of the VCIP Award, which the institution may use for its academic/instructional program.

Item 9. Enter that amount of the VCIP Award used for the Office of Veterans' Affairs (Item 6c minus Item 8).

Items 10 through 16. These data are only concerned with expenditures and obligations for the Office of Veterans' Affairs; exclude expenses from the "institutional share", Item 8. For the purpose of this Report "Expenditures and Obligations" should include amounts paid out and obligated for services rendered or an asset purchased for the maintenance and operation of the institution's Office of Veterans' Affairs (OVA). "Expenditures and Obligations" should be identified as VCIP Award funds (Column (1)); Institutional Contributions, if any, (Column (2)); and total OVA Expenditures and Obligations (Column (3)). Under "Other" (Item 16) include expenditures and obligations for rental of space, equipment lease or rental, printing, communications, and mailing, as appropriate. These expenses "Other" must be specified in Items [illegible]a through 16f and the total entered on Line 16. ATTACH AN INVENTORY DESCRIPTION INCLUDING DATE AND PRICE, OF ALL ITEMS PURCHASED HAVING $300 OR MORE UNIT VALUE.

Item 17. Enter the Net Award (Section A, Item 6c).

Item 18. Enter total VCIP funds expended in 18a. Enter total VCIP funds Obligated but unexpended in 18b. The total of 18a plus 18b MUST equal the total of Column 1, Section B. An unexpended obligation is an expenditure not yet paid which is evidenced by a contract or purchase order for equipment or services rendered prior to June 30, 1976.

Item 19. Enter the "Institutional Share" of VCIP Award (Section A, Item 8).

Item 20. Enter the sum of Lines 18 and 19.

Item 21. Enter the difference of Line 17 minus Line 20. The entry in line 21 may **NOT** be a negative amount. In due course an amount equal to the balance in Line 21 will be deducted from your Federal Assistance Finance account maintained at the National Institutes of Health.

Item 22. Enter actual amount withdrawn through the Federal Assistance Finance System of the National Institutes of Health (NIH), prior to June 30, 1976.

Items 23, 24, and 26. The institution's Fiscal Officer MUST sign and date the form in the respective spaces in order to properly certify the Report.

Item 25. Self-explanatory.

SECTION E. Identify by title all personnel employed by the Office of Veterans' Affairs during the 1975-76 Fiscal Year and the source of compensation (salaries). Enter the number of full-time persons (ONLY) in Column (1), the total number of part-time persons in Column (2a), and those part-time persons converted to Full-time Equivalent numbers in Column (2b). The figures in Column (2b) should accurately reflect ALL part-time persons employed by the OVA during the year, in terms of full-time equivalents. THE FIGURES ENTERED IN COLUMNS (2) and (3) MUST BE REPORTED IN DECIMALS CARRIED TO TWO PLACES. In Columns (4) and (5), enter compensation paid (DO NOT INCLUDE EMPLOYEE BENEFITS) from either Veterans' Cost-of-Instruction Program funds (Column (4), or Institutional funds, which may include total College Work-Study Program (CWSP) and Veterans Administration (VA) Work-Study funds (Column (5)). Add the amounts in Columns (4) and (5) and enter total compensation figures in Column (6). Transfer the respective totals from Columns (4), (5), and (6) to Section B, Line 10, Columns (1), (2), and (3). Line 1 (OVA Person Maintaining Full-time Requirement) is in accordance with Section 189.11 of the Regulations; complete only Columns (4), (5), and (6) of Line 1 as appropriate.

SECTION F. To be completed by members of a Consortium ONLY. Each individual Consortium institution must provide ALL requested data for Sections A through E. In addition to individual Reports, a Report showing composite expenditures, including Section E, must be presented by the Consortium. The Consortium Fiscal Officer MUST sign and date the form in the respective spaces to properly certify the combined Consortium Report.

OE Form

269-2

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

VETERANS' COST-OF-INSTRUCTION PAYMENTS TO INSTITUTIONS OF HIGHER EDUCATION

(Section 420 of the Higher Education Act of 1965, as amended by Title X of Public Law 92-318)

PROGRAM OPERATIONS REPORT

FORM APPROVED
OMB NO. 51-R1061

1. FISCAL YEAR ENDING
June 30, 19______

2. TYPE OF AWARD *(check one)*
☐ INDIVIDUAL INSTITUTION
☐ CONSORTIUM

3. NAME OF INSTITUTION OF HIGHER EDUCATION OR OF CONSORTIUM	4. ADDRESS *(number, street, city, State, and ZIP code)*	5. CONGRESSIONAL DISTRICT

6. TYPE OR PRINT NAME AND TITLE OF OFFICE OF VETERANS' AFFAIRS COORDINATOR	7. TELEPHONE	
	AREA CODE	NUMBER

8. PROVIDE A SINGLE SPACED STATEMENT SUMMARIZING THE ACCOMPLISHMENTS OF THE OFFICE OF VETERANS' AFFAIRS, FOR THE 1975-76 ACADEMIC YEAR, INCLUDING THE REASONS WHY VETERANS WERE EFFECTIVELY SERVED. THE STATEMENT SHOULD BE SPECIFIC, CLEARLY STATED AND MAY NOT EXCEED THE SPACE ALLOTTED ON THIS PAGE.

Further monies or other benefits may, but not necessarily, be withheld under these programs unless this report is completed and filed as required by existing Law and Regulations (20 U.S.C. 1070e-1; 40 C.F.R. 1053-1057).

I CERTIFY that all of the information contained herein is true, complete and correct to the best of my knowledge and belief.

9. TYPE NAME AND TITLE OF INSTITUTIONAL CHIEF ADMINISTRATIVE OFFICER	10. SIGNATURE	11. DATE

OE FORM 269-2, 8/76 REPLACES PREVIOUS EDITIONS.

NOTE: SEE INSTRUCTIONS FOR REQUIRED FORMAT. RESPONSES TO ITEMS 12 THROUGH 16 MUST BE SUBMITTED AS ATTACHMENT ONE TO THE PROGRAM OPERATIONS REPORT. THIS ATTACHMENT SHOULD NOT EXCEED FIVE (5) PAGES.

12. Discuss each of the following legislatively required services. Comments should be specific and clearly stated. Provide a brief but complete response for each item in accordance with the format described in the Instructions.

    a. OUTREACH: Describe the procedures used to assess the needs, problems and interests of all veterans in the institution's normal service area and specify the total number of veterans contacted during the 1975-76 Academic Year.

    b. RECRUITMENT: Cite techniques employed (publications, mass media, personal contacts, etc.) and comment on recruitment successes or failures.

    c. SPECIAL EDUCATION: Describe the remedial, motivational and tutorial programs conducted or coordinated by the Office of Veterans' Affairs to meet the special needs of veterans students enrolled at the institution. Include the total number of veterans receiving special education services, and specifically cite the number who received benefits under Sections 1691, 1692, and 1696 during the 1975-76 Academic Year.

    d. COUNSELING: Describe the professional assistance that was available to veteran students for consultation on (1) personal, (2) family, (3) career, and (4) educational problems and comment on the strengths and weaknesses of the counseling services provided. Indicate the number of veterans served by the Office of Veterans' Affairs and the number referred to other agencies.

13. Identify the major problems encountered by the Office of Veterans' Affairs during the 1975-76 Academic Year and explain how they were resolved.

14. Identify by title and professional qualifications, including veterans status, the person satisfying the full-time requirements for staffing the Office of Veterans' Affairs (Section 189.16(4) and (5) of the Regulations). List Major duties and responsibilities as stipulated in Regulations, Section 189.12.

15. Indicate what is needed, besides money to make the Veterans' Cost-of-Instruction Program more effective. Comments or recommendations may include any aspect of the program.

16. FOR CONSORTIUMS ONLY. List each consortium member and describe the role of each institution in providing the veterans' services required by Law.

SEE INSTRUCTIONS FOR FORMAT AND CONTENT OF ATTACHMENT TWO, WHICH MUST ACCOMPANY THE PROGRAM OPERATIONS REPORT.

IMPORTANT. Two copies of the completed report, each originally signed, must be submitted, with attachments, to the U.S. Office of Education, Director, Veterans' Programs Branch, Room 4613, ROB 3, 400 Maryland Avenue, SW., Washington, D.C. 20202, NO LATER THAN OCTOBER 15, 1976.

PROGRAM OPERATIONS REPORT

VETERANS' COST-OF-INSTRUCTION PAYMENTS TO INSTITUTIONS OF HIGHER EDUCATION

(Section 420 of the Higher Education Act of 1965, as amended, Title X of Public Law 92-318)

INSTRUCTIONS

Section 189.35 of the Regulations specifies that an Annual Report be submitted from each participating higher education institution no more than 30 days after the close of each academic year to measure program performance in accordance with the criteria established in Section 189.16.

ITEM 1. The 1975-76 Academic Year ended June 30, 1976. Enter "76"

ITEM 2. Check one block.

ITEMS 3, 4, and 5. Provide ALL information requested.

ITEM 6. Identify by name and title the person employed as Coordinator of the institution's Office of Veterans' Affairs.

ITEM 7. Self-explanatory.

ITEM 8. Statement need not be lengthy, but must be specific and clearly stated. Use space allotted.

ITEMS 9, 10, and 11. The appropriate institutional Chief Administrative Officer must sign and date the form in the respective spaces in order to properly certify the report.

ITEMS 12 through 16 (ATTACHMENT ONE). Typewritten responses to these items must be submitted as "Attachment One." Comments need not be lengthy and should not exceed more than 5 pages. They should be specific and clearly stated, and each item must be responded to. The name of the institution must be indicated on each sheet, and each sheet, in designated numerical order, must be affixed to the Program Operations Report as an orderly part of "Attachment One."

ATTACHMENT TWO. Prepare an "Attachment Two" cover page, listing any pamphlets, brochures, flyers, posters or other publications prepared in part or in whole with Veterans' Cost-of-Instruction Payment funds. Enclose, in designated numerical order, one copy of each such publication. Insure that each publication, or copy, is properly identified with the institution's name and Attachment Two reference number.

NOTE: Two copies of the completed Program Operations Report, each originally signed, must be submitted to the Director, Veterans' Programs Branch, Room 4613-ROB #3, U.S. Office of Education, 400 Maryland Avenue, SW., Washington, D.C. 20202, on or before October 15, 1976.

OE Form

269-3

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

FORM APPROVED
O.M.B. NO. 51-R1076

VETERANS' COST-OF-INSTRUCTION PAYMENTS TO INSTITUTIONS OF HIGHER EDUCATION

(Section 420 of the Higher Education Act of 1965, as amended, Title X of Public Law 92-318)

1. TYPE OF AWARD *(Check one)*
☐ INDIVIDUAL INSTITUTION
☐ CONSORTIUM-COOPERATIVE ARRANGEMENT

VETERAN STUDENT ENROLLMENT VERIFICATION

2. NAME OF INSTITUTION OF HIGHER EDUCATION OR OF CONSORTIUM	3. ADDRESS *(Include number, street, city, State and ZIP code)*	4. CONGRESSIONAL DISTRICT

5. NAME AND TITLE OF OFFICE OF VETERANS' AFFAIRS COORDINATOR	6. TELEPHONE		
	AREA CODE	NUMBER	EXTENSION

7. TOTAL UNDERGRADUATE STUDENT ENROLLMENT *(See Instructions)*	8. ELIGIBLE UNDERGRADUATE VETERANS ENROLLED *(See Instructions)*	9. ELIGIBLE VETERANS ENROLLED APRIL 16	10. ELIGIBLE VETERANS ENROLLED OCTOBER 16	OE USE ONLY	
		CATEGORY 1	CATEGORY 1	DIFFERENCE	ADJUSTMENT OCTOBER 16
		CATEGORY 2	CATEGORY 2		

11. ASSURANCE *(Check one)*
A. ☐ THE FIGURES IN ITEMS 7, 8 AND 9 ARE IDENTICAL WITH THE DATA PROVIDED IN THE 1975-76 VCIP APPLICATION
B. ☐ THE FIGURES IN ITEMS 7, 8 AND 9 ARE IN VARIANCE WITH THE DATA PROVIDED IN THE 1975-76 VCIP APPLICATION. A FULL ACCOUNTING, PROPERLY SIGNED, IS ATTACHED

12. ELIGIBLE VETERANS ENROLLED FEBRUARY 16	DIFFERENCE	ADJUSTMENT FEBRUARY 16
CATEGORY 1		
CATEGORY 2		

I CERTIFY that all of the information contained herein is true, complete and correct to the best of my knowledge and belief.

13. NAME AND TITLE OF INSTITUTIONAL CHIEF ADMINISTRATIVE OFFICER	14. SIGNATURE	15. DATE

IMPORTANT

Three copies of the completed report, each originally signed, must be submitted to the Chief, Veterans' Programs Branch, Room 4616 ROB, U.S. Office of Education, 400 Maryland Avenue, SW., Washington, D.C. 20202.

INSTRUCTIONS

(Reference: Regulations, Federal Register, Vol. 40, No. 104 – Thursday, May 29, 1975)

Section 189.3(b) of the Regulations specifies that "a cost-of-instruction payment for a given academic year shall, subject to the availability of funds, be computed on the basis of the number of students in attendance on April 16 of the preceding academic year and October 16 and February 16 of the given year." For the 1975-76 Academic Year, the Veteran Student Enrollment Verification Report must be filed twice, the first report to be submitted prior to November 16 and the second report to be filed on or before March 16. Three copies, each with original signatures, should be sent to the Chief, Veterans' Programs Branch, Room 4616, ROB #3, U.S. Office of Education, 400 Maryland Avenue, SW., Washington, D.C. 20202, on or before the specified dates.

ITEMS 1 through 6.– Self-explanatory. Provide **all** information requested.

ITEM 7 – Enter the **head count** of the total undergraduate **student** enrollment as of April 16, 1975. This figure should be identical with the data provided in Item 8 of the application. If current computations reveal errors in the data reported in the application, check the appropriate block in Item 11 and attach a complete explanation of the variance(s).

ITEM 8 – Enter the **head count** of eligible undergraduate veterans enrolled on April 16, 1975 as defined in Section 189.2 of the Regulations. This figure should be identical with the data provided in Item 9 of the 1975-76 application. If current computations reveal errors in the data reported in the application, check the appropriate block in Item 11 and attach a complete explanation of the variance(s). For computation purposes, "eligible" means:

(a) The veteran was an undergraduate student who was fully matriculated on AT LEAST a half-time basis (Section 189.1). Note that each such veteran counts as one student.

(b) The veteran was currently receiving benefits under Chapter 31 (vocational rehabilitation) and/or Chapter 34 (general educational assistance) of Title 38, United States Code. Also to be included in that count under

OE FORM 269-3, 9/75 REPLACES OE FORM 269-3, 9/74, WHICH IS OBSOLETE

INSTRUCTIONS *(Continued)*

Chapter 34, were those persons who were currently receiving benefits under (1) 1691 Benefits under Subchapter V (assistance to the educationally disadvantaged) and (2) 1696 Benefits under Subchapter VI (Predischarged Educational Programs or PREP). Included in Subchapter V were those individuals who received remediation training (deficiency, refresher or remedial courses such as General Education Development (GED), Adult Compensatory Education, and Veterans Upward Bound) available under 1691 money. Included in Subchapter VI were those individuals who participated in the PREP program, available at military bases and educational institutions under 1696 money. IT MUST BE NOTED that to have been eligible for counting, the PREP student must have had ready access to the Office of Veterans' Affairs and its related services which the applicant agreed to provide under the assurances and authorization of Part II and III.

ITEM 9. Enter the full-time equivalent number of undergraduate veteran students in attendance on April 16, 1975 who were receiving benefits under Chapter 31 and Chapter 34, Title 38, United States Code. For purposes of computing full-time equivalency, convert each full-time student to a factor of 1.00, each three-quarter time student to a factor of .75, and each half-time student to a factor of .50. Add these factors and enter total in Item 9 under Category 1. Definitions of "full-time", "three-quarter" and "half-time" students are found in Section 189.1 of the Regulations. Only those undergraduate veteran students who were receiving vocational rehabilitation subsistence (Chapter 31), general education subsistence (Chapter 34), 1691 benefits (remediation) or 1696 benefits (PREP) on April 16 should be included. Under Category 2, enter the full-time equivalent of undergraduate veteran students in attendance on April 16, 1975 who: (a) were currently receiving or had ever received benefits for tutorial assistance under Subchapter V, Chapter 34, Section 1692, and (b) those persons who had ever received but were not currently receiving benefits under Subchapter V and VI of Chapter 34, including those who had received remediation assistance (1691) and PREP (1696).

ITEM 10. Follow instructions in Item 9 above for determining individuals to be counted who are enrolled as eligible undergraduate veteran students on October 16. Enter the full-time equivalent number of eligible veterans in both Category 1 and Category 2.

ITEM 11. Check one. If "B" is checked, attach a complete explanation of variation in figures, signed by a responsible institutional official.

ITEM 12. (Applicable only for the second report to be filed on or before March 16.) Follow instructions in Item 9 above for determining individuals to be counted who are enrolled as eligible undergraduate veteran students on **February 16.** Enter the full-time equivalent number of eligible veterans in both Category 1 and Category 2.

Appendix C

VCIP Data Processing Documentation

DATA PROCESSING DOCUMENTATION

SYSTEM TITLE Veterans Cost of Instruction Program	SYSTEM ID VCI	PAGE 4-15
		DATE 3/77
		REVISION NO. 5

RECORD FORMAT SHEET

FILE TITLE/ID VETS Master/VCI.D000000.Sxx	RECORD TITLE Institution Data (Post-1973)	MEDIUM *(C) Card, (T) Tape, (D) Disk, or Specify* T

RECORD LENGTH *(Max. if variable)* 900 Bytes	BLOCKING FACTOR 0	RECORD TYPE *(F) Fixed, (V) Variable, (U) Undefined* F	I/O CODES *(I) Input (O) Output (I/O) Input/Output (IN) Intermediate*

LINE NO.	ELEMENT IDENT/NAME	POSITIONS		PROGRAM REFERENCE	
		FROM	TO	PROGRAM ID	I/O CODE
1	RECORD NUMBER	1	4	VCI000	(O)
2	FUNDING CODE (*=No Award made, b̸= An award made)	5	5	VCI010	(I/O)
3	O.E. VENDOR I.D. (Pre-1976 Record Key.EIN used post-'76)	6	11	VCI030	(I)
4	NIH VENDOR I.D.	12	17		
5	STATE CODE (corresponds to GRGSTTBL)	18	19	VCI040	(I)
6	NAME	20	54	VCI050	(I)
7	OLD CONGRESSIONAL DISTRICT	55	56		
8	CONSTANT-1	57	57	VCI060	(I)
9	FEDERAL REGION (0-9 10 is equated to 0)	58	58	VCI080	(I)
10	CONSTANT-2	59	59		
11	TYPE OF INSTITUTION (1=Univ.,2=4 yr Coll.,3=2 yr Coll., 4=Jr. Coll)	60	60		
12	PUBLIC OR PRIVATE SCHOOL (1=Public, 2=Private)	61	61		
13	STREET ADDRESS	62	91		
14	CITY	92	114		
15	STATE	115	116		
16	ZIP CODE	117	121		
17	CONSORTIUM (Blank=not a consortium, c=consortium)	122	122		
18	NEW CONGRESSIONAL DISTRICT	123	124		
19	STATUS (I=initial, R=renewal)	125	125	REMARKS	
20	CATEGORY 1 (units = Full-time Equivalence Factor)	128	133		
21	CATEGORY 2 (units = Full-Time Equivalence Factor)	134	139		
22	NIH TRANSACTION CODES	140	147		
23	SPECIAL SCHOOL (0=Neither Proprietary or vocational-technical, 1=proprietary,2=vocational-technical)	148	148		
24	CALCULATED AWARD	149	158		
25	ADJUSTMENTS TO AWARD	159	168		
26	NODATA (Blank=Print Report, N= Omit Printed Report)	169	169		
19A	Unused	126	127		

OE FORM 5345-11, 2/75

PREVIOUS EDITION IS OBSOLETE.

DATA PROCESSING DOCUMENTATION

SYSTEM TITLE Veteran's Cost of Instruction Program	**SYSTEM ID** VCI	**PAGE** 4-15-1
		DATE 3/77
		REVISION NO. 5

RECORD FORMAT SHEET

FILE TITLE/ID VETS MASTER/VCI.D000000.Sxx	**RECORD TITLE** Institution Data (Post-1973)	**MEDIUM** *(C) Card, (T) Tape, (D) Disk, or Specify* T
RECORD LENGTH *(Max. if variable)* 900	**BLOCKING FACTOR** 0	**RECORD TYPE** *(F) Fixed, (V) Variable, (U) Undefined* F
		I/O CODES *(I) Input (O) Outpu* *(I/C) Input/Output* *(IN) Intermediate*

LINE NO.	ELEMENT IDENT/NAME	POSITIONS FROM	POSITIONS TO
	FEDERAL ALLOTMENT & BUDGET SECTION A(Data is stored in packed decimal format)		
27	Original Award (6a)	170	175
28	Award Adjustments (6b)	176	181
29	Net Award (6c)	182	187
30	NON-VCIP FUNDS (7)	188	193
31	Institutional Share (Instruction) (8)	194	199
32	Office Maintenance Share (9)	200	205
	OFFICE MAINTENANCE (SECTION B)		
	SALARIES (line 10)		
33	VCI Funds (col. 1)	206	214
34	Institution Funds (col. 2)	215	223
35	Total (col.3)	224	232
	EMPLOYEE BENEFITS (line 11)		
36	VCI Funds (col. 1)	233	241
37	Institution Funds (col.2)	242	250
38	Total (col. 3)	251	259
	WORKSHOP/CONFERENCE (line 12)		
39	VCI Funds (col.1)	260	268
40	Institution Funds (col.2)	269.	277
41	Total (col.3)	278	286
	TRAVEL (line 13)		
42	VCI Funds (col. 1)	287	295
43	Institution Funds (col.2)	296	304
44	Total (col.3)	305	313
	EQUIPMENT PURCHASES (line 14)		
45	VCI Funds (col.1)	314	322
46	Institution Funds (col.2)	323	331
47	Total (col. 3)	332	340

PROGRAM REFERENCE

PROGRAM ID	I/O CODE
VCI000	(O)
VCI010	(I/O)
VCI030	(I)
VCI040	(I)
VCI050	(I)
VCI060	(I)
VCI080	(I)

REMARKS

OE FORM 5345-11, 2/75 PREVIOUS EDITION IS OBSOLETE.

DATA PROCESSING DOCUMENTATION

SYSTEM TITLE	SYSTEM ID	PAGE
Veteran's Cost of Instruction Program	VCI	4-15-2
		DATE 3/77
		REVISION NO. 5

RECORD FORMAT SHEET

FILE TITLE/ID	RECORD TITLE	MEDIUM *(C) Card, (T) Tape, (D) Disk, or Specify*
VETS MASTER/VCI.D000000.Sxx	Institution Data (Post-1973)	T

RECORD LENGTH *(Max. if variable)*	BLOCKING FACTOR	RECORD TYPE *(F) Fixed, (V) Variable, (U) Undefined*	I/O CODES *(I) Input (O) Output (I/C) Input/Output (IN) Intermediate*
900 Bytes	0	F	

LINE NO.	ELEMENT IDENT/NAME	POSITIONS FROM	POSITIONS TO
	Supplies (line 15)		
48	VCI Funds (col. 1)	341	349
49	Institution Funds (col. 2)	350	358
50	Total (col. 3)	359	367
	Other (line 16)		
51	VCI Funds (col. 2)	368	376
52	Insitution Funds (col. 2)	377	385
53	Total (col. 3)	386	394
	TOTAL		
54	VCI Funds (col. 1)	395	403
55	Institution Funds (col. 2)	404	412
56	Total (col. 3)	413	421
	Summary (Section C)		
57	Net Award (17)	422	430
58	Total Expenses & Obligations (18)	431	439
59	Institutional Share (19)	440	448
60	Total Debits From Award (20)	449	457
61	Remaining Credits (21)	458	466
62	NIH Contribution (22)	467	475
	Breakdown of Personal Services (Section E)		
	Full-time OVA Person:		
63	Number Full-time (1)	476	478
64	Total Part-time (2)	479	483
65	Total Employed (3)	484	489
66	VCIP Funds (4)	490	498
67	Institution Funds (5)	499	507
68	Total Awards (6)	508	516

PROGRAM REFERENCE

PROGRAM ID	I/O CODE
VCI000	(0)
VCI010	(I/0)
VCI030	(I)
VCI040	(I)
VCI050	(I)
VCI060	(I)
VCI080	(I)

REMARKS

DATA PROCESSING DOCUMENTATION

SYSTEM TITLE Veteran's Cost of Institution Program	**SYSTEM ID** VCI	**PAGE** 4-15-3
		DATE 3/77
		REVISION NO. 5

RECORD FORMAT SHEET

FILE TITLE/ID VETS MASTER/VCI.D000000.Sxx	**RECORD TITLE** Institution Data (Post-1973)	**MEDIUM** *(C) Card, (T) Tape, (D) Disk, or Specify* T

RECORD LENGTH *(Max. if variable)* 900 Bytes	**BLOCKING FACTOR** 0	**RECORD TYPE** *(F) Fixed, (V) Variable, (U) Undefined* F	**I/O CODES** *(I) Input (O) Outpu* *(I/C) Input/Output* *(IN) Intermediate*

LINE NO.	ELEMENT IDENT/NAME	POSITIONS FROM	POSITIONS TO
	Co-Ordinator:		
69	Number Full-time(1)	517	519
70	Total Part-time (2b)	520	524
71	Total Employed (3)	525	530
72	VCIP Funds (4)	531	539
73	Institutional Funds (5)	540	548
74	Total Award (6)	549	557
	Conselors:		
75	Number Full-time (1)	558	560
76	Total Part-time (2b)	561	565
77	Total Employed (3)	566	571
78	VCIP Funds (4)	572	580
79	Institution. Funds (5[illegible]	581	589
80	Total Award (6)	590	598
	Outreach Workers:		
81	Number Full-time (1)	599	601
82	Total Part-time (2b)	602	606
83	Total Employed (3)	607	612
84	VCIP Funds (4)	613	621
85	Institutional Funds (5)	622	630
86	Total Award (6)	631	639
	Recruiters:		
87	Number Full-time (1)	640	642
88	Total Part-time (2b)	643	647
89	Total Employed (3)	648	653
90	VCIP Funds (4)	654	662
91	Institutional Funds (5)	663	671
92	Total Awards (6)	672	680
	Secretaries:		
93	Number Full-time (1)	681	683
94	Total Part-time (2b)	684	688
95	Total Employed (3)	689	694
96	VCIP Funds (4)	695	703
97	Institutional Funds (6)	704	712
98	Total Awards (6)	713	721

PROGRAM REFERENCE

PROGRAM ID	I/O CODE
VCI000	(0)
VCI010	(I/0)
VCI030	(I)
VCI040	(I)
VCI050	(I)
VCI060	(I)
VCI080	(I)

REMARKS

DATA PROCESSING DOCUMENTATION

SYSTEM TITLE Veteran's Cost of Institution Program	SYSTEM ID VCI	PAGE 4-15-4
VETS MASTER/VCI.D000000.Sxx		DATE 3/77 REVISION NO. 5

RECORD FORMAT SHEET

FILE TITLE/ID VETS MASTER/VCI.D000000.Sxx	RECORD TITLE Institution Data (Post-1973)	MEDIUM *(C) Card, (T) Tape, (D) Disk, or Specify* T

RECORD LENGTH *(Max. if variable)* 900 Bytes	BLOCKING FACTOR 0	RECORD TYPE *(F) Fixed, (V) Variable, (U) Undefined* F	I/O CODES *(I) Input (O) Output (I/O) Input/Output (IN) Intermediate*

LINE NO.	ELEMENT IDENT/NAME	POSITIONS FROM	POSITIONS TO
	Clerks:		
99	Number Full-time (1)	722	724
100	Total Part-time (2b)	725	729
101	Total Employed (3)	730	735
102	VCIP Funds (4)	736	744
103	Institution Funds (5)	745	753
104	Total Award (6)	754	762
	Other (this line is for totals in 1973 file):		
105	Number Full-time (1)	763	765
106	Total Part-time (2b)	766	770
107	Total Employed (3)	771	776
108	VCIP Funds (4)	777	785
109	Institution Funds (5)	786	794
110	Total Award (6)	795	803
111	EIN	804	815
112	Re-allocation of Funds	816	825
113	New Award	826	835
114	Fiscal Year	836	837
115	NIH Transaction Numbers	838	847
116	Award Date	848	853
117	Can Number	854	860
118	Object Class	861	864
119	Report Period	865	872
120	(Filler)	873	900

PROGRAM REFERENCE

PROGRAM ID	I/O CODE
VCI000	(O)
VCI010	(I/O)
VCI030	(I)
VCI040	(I)
VCI050	(I)
VCI060	(I)
VCI080	(I)

REMARKS

Appendix D

Coder's Guide/Standardized Categorization Manual

Appendix D
Coder's Guide/Standardized Categorization Manual

This appendix consists of three components. Section A describes the development of the Coder's Guide through several iterations of variable description, review, and revision. Section B contains the Guide itself (frequently referred to as the Manual or Categorization Manual) as used in the current VCIP evaluation study. The Guide includes the actual display of variables for the study and directions for coders in analyzing the POR content. Section C provides a number of suggested revisions to the Guide, based on RTI's experience with it in this project, relating to wording of variables, training procedures, task description, and additional entries which might be considered for inclusion in a later version of this Manual for VCIP purposes. These minor revisions may also serve to improve the Manual if it is to be employed as a prototype.

A. Development of the Categorization Manual and Coder's Guide

There were two essential purposes for developing this document. The first was to identify and organize the variables of interest in the sample of PORs so that they could be employed in the evaluation design. The second purpose was to create a sufficiently comprehensive guide so that trained coders could work directly from the PORs in analyzing the POR content in terms of those identified variables.

Development of the variables and categories, as based on POR paragraph content, required several sequential steps as outlined below.

(1) In order to derive a first approximation of the variables to use in analysis, the POR items, the program Regulations, and the RFP requirements were studied together. It was found that the directions on the POR and the elements of the Regulations represented a mismatch, in that only some of the specific Regulations were covered. This was further examined in terms of the topical matrix included in the RFP, in an effort to resolve what the emphasis should be in the final set of variables and categories.

(2) RTI staff engaged in a cursory overview of 100 unselected PORs in order to obtain a sense of the variability involved in open-ended responses and to anticipate difficulties (in both the derivation of variables and the preparation of an appropriate coder's manual). Immediate findings were discussed with the Project Officer and program representative and tentative decisions were arrived at jointly. Some of the issues of concern were: content overlap among POR item responses, inclusion of and reference to Attachment Two materials, response omissions, repetitions, difficulties in adhering to POR directions, and definitions employed.

(3) A sample of 50 PORs was drawn (from the study sample of 400) to use in establishing the variables and categories. This sample of 50 was as close an approximation as possible to the sample of 400, using the same stratification variables and cell proportions.

(4) A preliminary display of content contained in 15 PORs was developed for study at RTI and review at USOE. A purposeful attempt was made to include all identifiable content in this display (organized into categories, subcategories, and variables) to be able to examine what was there and make decisions about what to include/exclude in the next iteration. This preliminary set of categories included content as much as possible directly related to the program Regulations, although it was determined that several Regulations could not be addressed since item directions did not require relevant responses.

(5) Following submission of the preliminary display, it was anticipated that a face-to-face review would be most productive and a meeting was arranged to study the display in detail and discuss certain basic issues. Examples of the apparent problems included: (a) material beyond "assessing veterans' needs" had been entered in the PORs under Outreach, even though the particular item asked only for a description of procedures relating to needs assessment; (b) numbers of veterans served were frequently reported as duplicated counts, for time periods

other than the one program year, and as estimates. The outcome of the review was to arrive at several important decisions regarding the variables, to reorganize the layout, to collapse certain entries, to add/delete variables, and to revise wording of some elements.

(6) Based upon previous steps, the list of categories and variables was revised and the remaining 35 PORs were coded accordingly. The task leader coded an additional 15 PORs while the project director and a project assistant each coded 10 instruments. These three RTI staff members then met to review each other's work, resolve differences, and make final recommendations regarding variables to include, particular wording, sequence of categories and variables for later coding, and the like. It should be noted that a considerable amount of change and revision was required at this point since (1) the viewpoints of additional persons were elicited and (2) an additional group of 35 PORs was included.

(7) Several key decisions were arrived at by USOE and RTI during this sequence of activities, and are reported here as a single group even though they were made at different points in time. These decisions affected both the list of categories and the Coder's Guide.

(1) To categorize and analyze content as contained in the POR rather than to search for predetermined content or expectations of any sort. As a result, it was determined to exclude Attachment Two, any of its materials, or any reference to it; to set aside basic questions raised by program staff in their preliminary outline of what to look for in the PORs; to ignore the Regulations per se, that is, in the sense of ascertaining what content fit the various Regulations; and to base the wording and tone of the list of variables on the wording contained in the POR leads as well as specific directions.

(2) To categorize and analyze certain content in the POR rather than all content provided by respondents. This resulted in exclusion of the item dealing with recommendations; exclusion

of the "accomplishments" reported in item 8; inclusion of problems no matter where they surfaced in the POR but without necessary regard to reported resolutions of those problems; exclusion of numbers served in Outreach; establishment of a category "Other" for content related to the four basic services but not specific to the POR items.

(3) To deal with overlap, duplication, omission, inconsistency, lack of clarity, etc., only as feasible within the constraints of time available. This resulted in the combining and collapsing of certain original entries; creation of a general variable "some activity reported but no specifics included;" utilization of a vita (for OVA director) to obtain certain information; creation of variables such as "No Response," "Not Applicable," "Duplicated Count," "OVA Says Can't Determine," and "Coder Can't Determine."

(4) To create a special category (and related variables) for reporting on OVA versus Institutional versus Outside Agency provision of basic VCIP services.

(5) To analyze and code POR content--according to the ultimate list of categories and variables--no matter where it appeared in the POR item responses. This required a set of special detailed directions in the Coding Guide, provision of examples, and extended training. The purpose here was to code all material relevant to the final set of variables, avoiding duplication but also avoiding omission simply because the material appeared in unexpected places.

(6) To organize the coding sheets in terms of categories, one to ten subcategories, and then related variables. The list of variables was thus employed directly as the coding sheet, providing a link between the data-reduction process for paragraph content and data entry for later analyses in the evaluation study.

(8) Based upon all prior steps and adhering to the decisions outlined just above, RTI staff finalized the list of variables into a 19-page document for direct use in the coding process.

Upon submission to USOE for final review, it was accompanied by further notes concerning continuing unresolved issues, procedures required under the circumstances, implications for accomplishing the coding task, and inherent limitations in the fact of the POR item directions.

(9) Review and finalization of the list of categories and variables was completed, and the resulting code sheets were then formated, sequenced, and organized for inclusion in the Coder's Manual.

B. Coder's Guide and Standardized Categorization Mannual

Completion of the training manual itself, initiated during the latter stages of development of the list of categories and variables, was accomplished fairly quickly because of the intimate relationship between the two elements and the fact that many aspects of the training document had been anticipated. Thus, the Manual reflects many of the steps, issues, and decisions which also played a role in creating the ultimate list of variables. Given various comments in the text of this report and in the preceding sections of Appendix D, it is not surprising that the Coder's Guide is long and complex. It was necessary to attempt to cover all bases, to account for exceptions, to allow for coder judgement, and to provide a background sufficient to answer most questions in advance of engaging in the task itself.

The Coder's Manual, as included below in this appendix, consists of three sections: Background and Training Steps for Coders; the List of Variables and thus the coding booklet itself; and General and Specific Directions for Coding.

The Manual carries a formal tone in that it was intended to be a complete guide for several coders in the current project and also in future possible work with the POR's open-ended items. At the same time, it attempts to provide a useful context in which the coder can work, as opposed to merely directing the coder to engage in a series of tasks with little sense of the VCIP program, the POR and its items, or the ultimate purpose of the coding activity. This seemed especially important to take into account since the coding task--as reflected in the total Guide--was bound to be difficult and somewhat frustrating. Indeed, in actual practice it became necessary to clarify the essence of the task more than once and from two points of view: (1) coders tended at times to attempt coding all or most all material in the POR, even though they were instructed initially to code only what the Guide outlined and thus what the project was looking for; and (2) equally important, coders at times felt "guilty" and pressured when they could not find in the POR any content that satisfied what the Guide was looking for, and reassurance was called for. These approaches to the task, while regrettable and time-consuming, nonetheless are understandable in view of the lengthy paragraph material often encountered and the requirement to search throughout the POR items for given kinds of response input.

A glance at the Guide will illustrate the complexity of the coding task, especially when the number of directions is considered along with the interrelationships among them. The complexity involved in preparing the Guide itself so that it would serve both the coders' and the project's needs will also become apparent. It was necessary, for example, to have several references for index purposes: the specific POR items had to be referred to in the Guide by number so the coder could stay on course; Section numbers, in Roman numerals, were introduced in order to relate categories and variables to the items but at the same time to avoid expecting that the pertinent data would appear in only one POR item; a lettering system was required in each Section in order to focus on different kinds of responses under the same broad topic; and, finally, the two-digit numerical scheme itself was added so that coding could take place directly on the page. In addition, in order to expedite data entry for computer analysis, card number indicators were also placed on each page of the Guide used for direct coding purposes.

The result was a comprehensive and flexible, if lengthy and complex, Guide. With the intended training (provided by a supervisor), it sufficed to accomplish the task, although it was necessary to field many specific questions throughout the coding period. Although 50 PORs had been used in creating the variables and the Guide, that effort was not able to cover all contengencies in the remaining 350 report forms principally because the open-ended items were so open as to elicit a remarkable array of interpretations and responses.

The following pages contain the Guide/Manual as it was employed in the VCIP evaluation project. It should be understood, however, that in actual practice it was amplified by the supervisor's comments and examples (the supervisor had coded a number of PORs in the development of the variables) and by group discussion as well as practice. As anticipated, it was not feasible for coders to work only with the Guide even toward the end of the task; the situation required redefinition at times, answers to specific questions on specific PORs, and general supervision.

CODER'S GUIDE
Standardized Categorization Manual
for the
Program Operations Report (Form 269-2) (POR)
Veterans Cost-of-Instruction Program (VCIP)
1975-76 Program Year

This manual contains three sections which together constitute a comprehensive guide for coding Institutional responses to several open-ended items on the annual report form for VCIP. The first section includes background information, an overview of purpose and procedure, and initial steps to be undertaken by the coder. The second section contains a detailed list of topics and categories which serves to show both the complete spectrum of content to be coded and the format on which coding will be done for each Institution. The final section is a set of specific directions for accomplishing the coding task itself, including sequence of activities, handling of exceptions, specific items, and similar matters.

A. Background and Preliminary Steps for Coders

1. Background and Purpose

For the 1975-76 program year, much of the formal annual reporting for VCIP to the Office of Education consisted of responses to open-ended items -- meaning that the directions requested paragraph reactions to the various questions concerned with program description. In most cases, the Institutions with VCIP awards had considerable freedom in determining how much detail to report, how much space to use, and what additional information to include.

As a result, the formal reports vary widely in the amount and type of data they contain -- as well as in the style and tone of language used -- although in the most basic sense, most of the Program Operations Reports (PORs) discuss the same variables and the same general program. The purpose of this coding task is to reduce the open-ended response material to manageable proportions (through analysis of the open-ended content) in order to describe the program across all Institutions and to determine the extent of program similarity (and difference). In order to get this process started, 50 of the PORs have been studied in detail and the important content has been identified. This material (in semi-outline form) appears as Section B of this Guide and it will serve as the basis for coding a large number of other PORs. (To be sure, some information will appear that is not included in Section B, and this will be coded into several "Other" categories).

Thus, the major steps in organizing the task have already been accomplished so that the job itself can be done as consistently as possible across the whole set of PORs to be coded. This applies to both the content to be coded and the procedure to be used. There are a number of guidelines or directions -- to be followed by all coders -- that will make for a consistent approach and a consistent outcome. Such directions are necessary because of the wide variation in the handling of the open-ended items by personnel at the Institutions.

As a final piece of background, each Institution with a VCIP award has a special office (OVA, the Office of Veterans Affairs or similar title) which is responsible for providing four major types of service to veterans in the area and especially those enrolled in the Institution. These are Outreach (determining veterans' needs and providing information); Recruitment (helping vets to enroll in postsecondary programs and sometimes high school completion); Special Education (providing developmental or remedial work in academic and basic subjects, directly or indirectly); and Counseling (providing or referring to counseling assistance on a wide range of topics and needs). In addition -- in order to make these services work -- the OVA must coordinate its activities with other agencies on the same campus or in the area, and must try to solve various difficulties as they arise.

2. Sequence of Initial Steps

The coder will follow the steps outlined here as the most efficient way of becoming familiar with the general task at hand and the relationships among various subtasks.

(a) Read the Regulations governing the VCIP award cycle (Subpart B, Federal Register, May 29, 1975) to get a sense of the requirements, the definitions used, and the exemptions for small Institutions.

(b) Read a blank copy of the POR, noting that item 8 appears on a single report form sheet while items 12-16 appear as a set of directions (on a separate sheet) for providing information as "Attachment One." All these items are openended, to be completed in terms only of the given directions. (NOTE: The POR is a somewhat reduced version of what the Regulations cover; that is, the POR does not include all the particulars outlined in the Regulations).

(c) Read Section B of this Guide -- the list of topics and categories which are to be coded -- to get a sense of the full range of content involved (by major topic, category, subcategory) and how that content relates to the items of the POR. (NOTE: The actual categories are further reduced from the Regulations in that not all items or parts of items in the POR are to be coded. This point will be expanded on in Section C of this Guide).

(d) Now read the two completed PORs given to you by the Coding Supervisor (including all items submitted as Attachment One), to get a feel for the variety of response to the items, and the necessity of identifying specific bits of information as contained in the extended text of the open-ended questions. (NOTE: do not attempt to do any coding at this time).

(e) Remind yourself of these usages in the coding task:

- Form 269-2 = Another name for the POR
- POR = Program Operations Report (item 8)
- Attachment One = (items 12-16 of the POR)
- VCIP = Veterans Cost-of-Instruction Program
- OVA = Office of Veterans Affairs on a campus
- VA = Veterans Administration
- OE = Office of Education (sometimes USOE)
- HEW = Dept. of Health, Education, Welfare; (HEW includes OE)
- Regs = Federal Regulations governing VCIP
- Institution = college, university, community college, technical school, etc., with a VCIP award
- Q = questionnaire or survey form
- GED = General Education Development (high school equivalency)
- ABE = Adult Basic Education (literacy)
- "re" or "in re" = regarding or concerning

(f) Read Section C of this Guide, referring as needed to the content categories in Section B and to the two PORs already examined. In a first reading, get a sense of the complexity involved; any exceptions to general rules; the special emphasis on the fact that some content called for in a certain item may appear under other items, etc.

(g) Meet with the Coding Supervisor to review the process to this point, get major questions asked and cleared up, develop a sense of the OVA's role on the Institutional campus, and so on.

(h) Using all materials and steps up to this point, code the two PORs with which you are now familiar --on separate coding sheet sets. Do this on your own and try to accomplish each one in a maximum of 20 minutes. Where you have a problem deciding just where to code given content, be sure to mark this directly on the POR for later discussion and resolution.

(i) Make a final check on each of the two PORs to be sure that at least one code is circled for each of the 21 Sections on the coding sheet (these Sections are ordered by Roman numerals, I to XXI).

(j) Confer with the Coding Supervisor about special questions or problems; location of given information in more than one item; interpretation of codes; how to fit information into the existing codes; distinction between "code all that apply" and "mutually exclusive codes;" and so on. The Supervisor will then make assignments, set up schedules, and arrange procedures for resolving additional problems as they come up.

The following pages contain some of the background material needed in the preparation steps for coding.

A. Federal Regulations, Subpart B (page 23303)--one page

B. Blank Copy of Program Operations Report (POR)--two pages

NOTES:

1. Note that the Institutional ID may appear anywhere across the top.

2. The first page of the POR contains only Item 8.

3. The second page contains POR Items 12 (A-D), 13, 14. Remember that Items 15 and 16 are to be ignored entirely.

4. On both POR pages, the lightly underlined phrases indicate those portions which you are to ignore in coding. These are all referred to specifically in the Coding Guide (page C-1).

Subpart B—Required Services and Use of Funds

§ 189.11 Special definitions.

For purposes of this subpart:

(a) "Full-time," with respect to an office of veterans' affairs, means that the office of veterans' affairs (1) is staffed by at least one person who is employed by an institution on a full-time basis and whose sole institutional responsibility is that of coordinating the activities of the office (except that an institution described in § 189.14 may employ part-time employees for this purpose who together assume the responsibility of at least one full-time employee) and (2) provides services at times and places convenient to the veterans being served.

(b) "Outreach" means an extensive, coordinated, communitywide program of reaching veterans within the institution's normal service area, determining their needs, and making appropriate referral and follow-up arrangements with relevant service agencies.

(c) "Recruitment" means a concerted effort to interest veterans in taking advantage of opportunities for a wide variety of postsecondary training experiences at the institution.

(d) "Special education programs" means specially designed remedial, tutorial, and motivational programs designed to promote success in the postsecondary experience.

(e) "Counseling" means professional assistance available to veterans for consulation on personal, family, educational, and career problems.

(20 U.S.C. 1070e–1.)

§ 189.12 Office of veterans' affairs.

Except as provided in § 189.14, an application for assistance under this part shall be approved only if the Commissioner is satisfied that the applicant will maintain, during the period for which the award is made, a full-time office of veterans' affairs with adequate services, in light of the criteria set forth in § 189.16, in the areas of outreach, recruitment, special education programs, and counseling.

(20 U.S.C. 1070e–1.)

§ 189.13 Related veterans' services.

Except as provided in § 189.14, an application for assistance under this part shall be approved only if the Commissioner is satisfied that the applicant will, during the period for which the award is made, make an adequate effort, as measured by the criteria set forth in § 189.16, to carry out:

(a) Programs designed to prepare educationally disadvantaged veterans for postsecondary education (1) under subchapter V of chapter 34 of title 38, United States Code, and (2) in the case of any institution located near a military installation, under subchapter VI of such chapter 34;

(b) Active outreach, recruiting, and counseling activities through the use of other funds such as those available under federally assisted work-study programs; and

(c) An active tutorial assistance program (including dissemination of information regarding such program) in order to make maximum use of the benefits available under section 1692 of title 38, United States Code.

(20 U.S.C. 1070e–1.)

§ 189.14 Institutions with small numbers of students and veterans.

An institution with less than 2,500 students and no more than 70 undergraduate veteran students in attendance on April 16 (or, where such date falls between academic terms of the institution, the end of the previous academic term) of an academic year during which assistance under this part is sought need provide the services described in § 189.12 only to the extent of maintaining a full-time office of veterans' affairs with adequate services in the areas of recruitment and counseling, and need not provide the services described in § 189.13.

(20 U.S.C. 1070e–1.)

§ 189.15 Consortium agreements.

In the case of an institution with less than 2,500 students in attendance on April 16 (or, where such date falls between academic terms of the institution, the end of the previous academic term) of an academic year during which assistance under this part is sought, the Commissioner may permit one or more of the functions set forth in §§ 189.12 and 189.13 to be carried out under a consortium agreement between that institution and one or more other such institutions located within a reasonable commuting distance therefrom if he finds that (a) such institution cannot feasibly carry out such functions by itself, and (b) the benefits of such functions will be readily accessible to veterans attending, and to veterans in the community served by, each of the institutions which are parties to the agreement.

(20 U.S.C. 1070e–1.)

§ 189.16 Criteria for assessing adequacy of veterans' programs.

An applicant institution's assurance pursuant to § 189.21(b)(6), with respect to the requirements of §§ 189.12 and 189.13 and to the extent that such requirements are not waived pursuant to § 189.14, shall be made in light of the following criteria, which criteria shall also be used by the Commissioner in evaluating the adequacy of the institution's veterans' programs:

(a) *In general.*—(1) Adequate identification and assessment of the veteran population in the institution's normal service area;

(2) Appropriate consideration, in terms of programs and services, of the number of veterans enrolled at the institution;

(3) The establishment of an advisory mechanism involving community and institutional personnel to assist in the institution's decisionmaking process with respect to veterans' services and through which the institution may become aware of the views of the institution's administrative and academic staff, its veteran student population, and relevant community organizations;

(4) The use of qualified Vietnam-era veterans in staffing the institution's office of veterans' affairs and in providing related services;

(5) The employment of a sufficient number of qualified staff members in order to adequately support required veterans' activities and services;

(6) The provision of adequate, visible and accessible housing for the institution's office of veterans' affairs, in light of the institution's veteran student enrollment and physical environment; and

(7) The coordination of veterans services with other campus services available to veterans, such as admissions student financial aid, counseling, and job placement.

(b) With respect to outreach, the establishment and maintenance of—

(1) Contact with veterans in the institution's normal service area;

(2) A procedure for assessing veterans' needs, problems, and interests; and

(3) A coordinated and extensive referral service involving agencies providing assistance in areas such as housing, employment, health, recreation, vocational and technical training, and financial assistance;

(c) With respect to recruitment, the establishment and maintenance of a process of bringing the maximum number of veterans into purposeful systematic programs of postsecondary education most suited to their educational and career aspirations, including such techniques as publications, use of mass media, and personal contacts;

(d) With respect to special education programs, the establishment and maintenance of—

(1) Support from appropriate departments of the institution for launching special education programs for the veteran student of a remedial, motivational, and tutorial nature;

(2) Support throughout the institution for appropriate changes in rules, policies, and procedures that will accommodate the special needs and problems of the veteran student; and

(3) Adequate guidance for individual veteran students that will insure the highest possible rate of their retention in educational programs; and

(e) With respect to counseling, the establishment and maintenance of—

(1) Ease of access of veteran students to professional assistance for consultation on personal, family, educational, and career problems as appropriate and necessary; and

(2) Frequent and scheduled liaison of the office of veterans' affairs with the institution's academic departments, counseling service, and central administration.

(20 U.S.C. 1070e–1)

§ 189.17 Expenditure requirements.

(a) Not less than (1) 75 percent of funds awarded to an institution under

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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

VETERANS' COST-OF-INSTRUCTION PAYMENTS TO INSTITUTIONS OF HIGHER EDUCATION

(Section 420 of the Higher Education Act of 1965, as amended by Title X of Public Law 92-318)

PROGRAM OPERATIONS REPORT

FORM APPROVED
OMB NO. 51-R1061

1. FISCAL YEAR ENDING
June 30, 19______

2. TYPE OF AWARD *(check one)*
☐ INDIVIDUAL INSTITUTION
☐ CONSORTIUM

3. NAME OF INSTITUTION OF HIGHER EDUCATION OR OF CONSORTIUM	4. ADDRESS *(number, street, city, State, and ZIP code)*	5. CONGRESSIONAL DISTRICT

6. TYPE OR PRINT NAME AND TITLE OF OFFICE OF VETERANS' AFFAIRS COORDINATOR	7. TELEPHONE AREA CODE	NUMBER

8. PROVIDE A SINGLE SPACED STATEMENT SUMMARIZING THE ACCOMPLISHMENTS OF THE OFFICE OF VETERANS' AFFAIRS, FOR THE 1975-76 ACADEMIC YEAR, INCLUDING THE REASONS WHY VETERANS WERE EFFECTIVELY SERVED. THE STATEMENT SHOULD BE SPECIFIC, CLEARLY STATED AND MAY NOT EXCEED THE SPACE ALLOTTED ON THIS PAGE.

6-DIGIT INSTITUTIONAL ID APPEARS AT TOP OF PAGE

Further monies or other benefits may, but not necessarily, be withheld under these programs unless this report is completed and filed as required by existing Law and Regulations (20 U.S.C. 1070e-1; 40 C.F.R. 1053-1057).

I CERTIFY that all of the information contained herein is true, complete and correct to the best of my knowledge and belief.

9. TYPE NAME AND TITLE OF INSTITUTIONAL CHIEF ADMINISTRATIVE OFFICER	10. SIGNATURE	11. DATE

OE FORM 269-2, 8/76 REPLACES PREVIOUS EDITIONS.

NOTE: SEE INSTRUCTIONS FOR REQUIRED FORMAT. RESPONSES TO ITEMS 12 THROUGH 16 MUST BE SUBMITTED AS ATTACHMENT ONE TO THE PROGRAM OPERATIONS REPORT. THIS ATTACHMENT SHOULD NOT EXCEED FIVE (5) PAGES.

12. Discuss each of the following legislatively required services. Comments should be specific and clearly stated. Provide a brief but complete response for each item in accordance with the format described in the Instructions.

a. OUTREACH: Describe the procedures used to assess the needs, problems and interests of all veterans in the institution's normal service area and specify the total number of veterans contacted during the 1975-76 Academic Year.

b. RECRUITMENT: Cite techniques employed (publications, mass media, personal contacts, etc.) and comment on recruitment successes or failures.

c. SPECIAL EDUCATION: Describe the remedial, motivational and tutorial programs conducted or coordinated by the Office of Veterans' Affairs to meet the special needs of veterans students enrolled at the institution. Include the total number of veterans receiving special education services, and specifically cite the number who received benefits under Sections 1691, 1692, and 1696 during the 1975-76 Academic Year.

d. COUNSELING: Describe the professional assistance that was available to veteran students for consultation on (1) personal, (2) family, (3) career, and (4) educational problems and comment on the strengths and weaknesses of the counseling services provided. Indicate the number of veterans served by the Office of Veterans' Affairs and the number referred to other agencies.

13. Identify the major problems encountered by the Office of Veterans' Affairs during the 1975-76 Academic Year and explain how they were resolved.

14. Identify by title and professional qualifications, including veterans status, the person satisfying the full-time requirements for staffing the Office of Veterans' Affairs (Section 189.16(4) and (5) of the Regulations). List Major duties and responsibilities as stipulated in Regulations, Section 189.12.

15. ~~Indicate what is needed, besides money to make the Veterans' Cost-of-Instruction Program more effective. Comments or recommendations may include any aspect of the program.~~

16. ~~FOR CONSORTIUMS ONLY. List each consortium member and describe the role of each institution in providing the veterans' services required by Law.~~

SEE INSTRUCTIONS FOR FORMAT AND CONTENT OF ATTACHMENT TWO, WHICH MUST ACCOMPANY THE PROGRAM OPERATIONS REPORT.

IMPORTANT. Two copies of the completed report, each originally signed, must be submitted, with attachments, to the U.S. Office of Education, Director, Veterans' Programs Branch, Room 4613, ROB 3, 400 Maryland Avenue, SW., Washington, D.C. 20202, NO LATER THAN OCTOBER 15, 1976.

B. Detailed List of Topics and Categories

This portion of the Guide contains all the content categories to be coded for Sections I-XXI. Note that these Sections follow pretty closely the order and topics of the POR items — but there are two major differences. One is that POR Item 8 comes much nearer the end than the beginning of the series. The other is that several of the POR items are broken into 2-3-4 subparts, making for many more Sections than there are items. Both differences are required by the nature of the material and both will simplify the coding task over what it would otherwise have been.

All Sections are keyed to POR Items at the top of each page, so that coders can easily relate the topics here to Items 8 and 12-16. The Sections are always indicated by Roman numerals. Subsections are denoted by capital letters as a further guide for organizing the content. The actual variables — always marked by Arabic numerals to the left — are the only entries on the page to be coded (that is, to be circled; specific directions appear in Section C). The coding sheets are organized so that they serve as a content guide to the coder and as the sheet on which coding will be directly done. They thus become the raw material for data entry procedures.

CARD # 1 Page 1 **CODING SHEETS**

OUTREACH: POR Item 12 A

VCIP Institution ID ☐☐☐☐☒☒

Ⓘ Describe Procedures used to assess needs, problems, interests

A General

6 Report use of some procedure, but no details or description given

B Specific to individuals

7 Formal needs survey or study, all vets on campus and/or in service area
8 Telephone contacts and/or responses to calls
9 Tearsheets or return cards re needs of all sorts
10 Daily contact with walkins; regular counseling; interviews
11 Specific followup contact after return of Q
12 Vet students serve as "peer reps" for problem communication
13 Group meetings of veterans with individual contact included
14 Consult records of Admissions Office, Registrar, etc.
15 OVA Personal Contact Elsewhere...Reformatory, Prison, or similar facility
16 OVA Personal Contact Elsewhere...In the field, in service area, in agencies
17 Personal contact by other campus agency
18 Personal contact by off-campus agency
19 Other procedure "specific to individuals"...(ENTER PROCEDURE SEPARATELY) ►

C General to Veterans ("What are Vets' needs and interests?")

20 Consult veterans service or advisory groups, vet clubs
21 Consult referral agencies (of all sorts)
22 Consult surveys or reports by college system or other agency
23 Other procedure "general to veterans".........(ENTER PROCEDURE SEPARATELY) ►

D Response Quality

24 { 1 No response to Section I
2 Not applicable (states is a small institution, has no procedure, outreach not required, etc.)

▲

REMINDER TO CODER: Circle numbers only in the column directly above the arrow. This applies on every page. DO NOT circle numbers that appear to the left of brackets.

Coder Number		
Completed		/ /78
Edit		/ /78
Data Entry		

CARD # 1

OUTREACH: POR Item 12 A

VCIP Institution ID ________________

II Activities to Inform, Disseminate (re OVA, Services, benefits, regulations)

A Activities

25 Flyers, brochures, radio spots, posters, ads, news releases, etc. etc.
26 Letters to vets on campus and/or in service area
27 Combination of media, interviews, letters
28 Special events: Presentations, workshops, club meetings, etc.
29 Other activities to inform, disseminate.....(ENTER PROCEDURE SEPARATELY) ►

B Response Quality

30 { 1 No response to Section II
2 Not applicable

III Means of Identifying Veteran Population

A Direct (or implied) use of namelists supplied by:

31 Veterans organizations
32 Government agencies (employment office, courthouse, register of deeds)
33 VA (lists of those recently separated)
34 Educational institutions or boards
35 Military bases
36 Other namelists ....(ENTER NAMELIST SEPARATELY) ►

B Direct Contact with veterans at:

37 Vocational schools, jr colleges, other educational institutions
38 Places of employment
39 Community agencies or locations of all sorts
40 Military bases
41 Other means of direct contact.................(ENTER LOCATIONS SEPARATELY) ►

C Other Means of Identification

42 Return postcards, tearsheets, or telephone calls (response to outreach), etc.

D Response Quality

43 { 1 No response to Section III
2 Not applicable

CARD # 1

RECRUITMENT: POR Item 12 B VCIP Institution ID ____________

ⓘⓥ (Cite) Techniques Used by OVA

A General

44 Report use of some technique(s), but no details or description given

B Indirect (dissemination, information)

45 Publications and media (general, no further details given)

46 Campus, service, and local newspaper releases, articles, coverage, ads

47 Outdoor advertising: billboards, posters, kiosks, buses, etc.

48 Institution's general recruitment materials

49 Distribution of pamphlets, brochures, fliers, (in general, or to strategic locations such as display racks, shop centers, govt. agencies, vet clubs, etc.)

50 Radio and/or TV spots

51 Return postal card or tearsheet for vet to indicate interest

52 Written or telephone contact with other agencies (for them, in effect, to do the recruiting) military groups, industry, labor, vet clubs, government, VA hospitals, clergy, business, Jr. college, etc.

53 Pens, T-shirts, stickers, other gimmicks

54 Other indirect techniques ....(ENTER TECHNIQUE SEPARATELY) ➤

C Direct Contact

55 Direct contact engaged in (no specifics)

56 Make contacts in minority communities

57 Personal appearances at strategic locations (county fair, shop ctrs, govt offices, businesses, jr colleges, vet orgs, etc.)

58 Make presentations at educational instit. (highschool, tech schools, etc.)

59 Visit nearby military bases, talk with future vets

60 Visit all sorts of other agencies and public events

61 Telephone contact with likely population, prospects

62 Letters, mailings to recently-released vets; vets on campus

63 Attend off-campus registrations

64 Personal contacts; referrals to OVA; walkin inquiries; OVA open house

65 Other direct techniques ....(ENTER TECHNIQUE SEPARATELY) ➤

D Response Quality

66 (1 No response to Section IV

2 Not applicable

▲

CARD # 1

RECRUITMENT: POR Item 12 B VCIP Institution ID ________________

V Comment on Recruitment Successes

A General

67 Implies or states satisfaction or success (no specifics given)

B Fruitful Endeavors

68 Personal appearances, direct contact of all sorts

69 Joint efforts with colleagues re strategies

70 Work at military bases before discharges

71 Use of Q with vets re quality of OVA recruitment service

72 "Advertising" of all sorts (mass media, letters, mailouts, etc.)

73 Other "fruitful endeavors" .... (ENTER ENDEAVORS SEPARATELY) ➤

C Outcomes

74 Large number vets contacted and informed of services

75 Increase in veteran enrollment this year (new vets or total)

76 Maintained level of enrollment

77 Feedback on OVA effort was good

78 Increase in admissions inquires or inquires to OVA

79 Other outcomes...................... (ENTER OUTCOMES SEPARATELY) ➤

D Response Quality

80 { 1 No response to Section V
2 Not applicable

▲

CARD # 2

RECRUITMENT: POR Item 12 B   VCIP Institution ID ________________

(VI) Comment on Recruitment Failures or Difficulties

A General

6 Implies or states failure or dissatisfaction (no specifics given)

B Related to Recruitment Effort

7 Some vets had to leave institution because of delimiting dates

8 Decrease in enrollment (this year or next)

9 Not broad enough curricular program to satisfy needs

10 Minimal contact because of minimal staff (or funds)

11 Recruitment setback (because of tuition increase, national publicity on GI Bill abuse, enforced attendance policy, etc., etc.)

12 Minimal success with women, ethnic subgroups, and/or disadvantaged

13 Others, related to recruitment.................(ENTER SEPARATELY) ➤

C Actual Practices Deemed Unsuccessful

14 Mailings to other groups or agencies

15 "Advertising" of all sorts (mass media, letters, mailouts, etc.)

16 Other unsuccessful practices...................(ENTER SEPARATELY) ➤

D Item Quality

17 { 1 No response to Section VI
   2 Not applicable

SPECIAL EDUCATION: POR Item 12 C

(VII) Coordination of Special Education

A Nature of Activity (There is a clear indication that...)

18 { 1 OVA coordinates and refers only; no direct service by OVA
   2 OVA provides all services directly; does not refer or coordinate
   3 OVA provides services directly and refers or coordinates

B Response Quality

19 { 1 No response to Section VII (or no clear indication of activity)
   2 Not applicable

▲

CARD # 2

SPECIAL EDUCATION: POR Item 12 C VCIP Institution ID ________________

VIII (List) available services either conducted or coordinated

A General

20 Special Education services are available (no specifics given)

B Remedial, Compensatory, and/or Developmental (course, lab, program, other)

21 General (no subject areas named)
22 Mathematics
23 English--language, writing, composition, communication
24 Reading
25 Study skills
26 Any other academic area (psychology, science, etc., etc.)
27 GED course or program (Gen'l Ed. Development, H.S. equivalency)
28 ABE course or program (Adult Basic Ed.)
29 Other remedial, comp, del service ....(ENTER SEPARATELY) ➤

C Motivational

30 General (no specifics)
31 Career workshop (or related--technical, occupations)
32 Personal development
33 College life, academic adjustment, orientation
34 Other motivational service ....(ENTER SEPARATELY) ➤

D Tutorial

35 General (tutoring is available; subjects may or may not be named)
36 Study Center, Tutorial Center, Learning Lab, Reading Center, etc.
37 Other tutorial service.................................(ENTER SEPARATELY) ➤

E Selected Related Practices

38 Diagnostic testing, placement testing
39 Network of tutors available (peers, vets, faculty, paid, other)
40 Refer vets to Special Services, Upward Bound
41 OVA or institution has developed special courses, etc., for veterans
42 Periodic conferences to assess status, progress, needs (required or regular)
43 Other related practices.................................(ENTER SEPARATELY) ➤

F Response Quality

44 (1 No response to Section VIII
2 Not applicable (states is small institution, not required, etc.)

CARD # 2

SPECIAL EDUCATION: POR Item 12 C VCIP Institution ID ____________________

ⓘX Number of Veterans Receiving Special Education Services (any sort or source)

A Unduplicated Total (precise figure or estimate)

45
1 None
2 1-99 "Few" "Several" "Some"
3 100-499
4 500 + "Many" "Large Number" "Most" "All vets enrolled"

B Other

46 OVA says can't determine figure (for whatever reason)
47 Coder can't determine figure (too many figures, qualifications, confused or overlapping entries, partial, one semester only, etc.)

C Response Quality

48
1 No response to Section IX
2 Not applicable
3 Duplicated count

X (Cite) Number of Veterans Served Under VA Sections (Tutorial Benefits)

A Section 1691

49
1 None
2 1-99
3 100-299
4 300 +

B Section 1692

50
1 None
2 1-99
3 100-299
4 300 +

C Section 1696

51
1 None
2 1-99
3 100-299
4 300 +

D Total VA Sections (Stated or Derived)

52
1 None
2 1-99
3 100-499
4 500 +
5 OVA says can't determine total
6 Coder can't determine total (too many figures, qualifications, confused or overlapping entries, partial, one semester only, etc.)

D Response Quality

53
1 No response to Section X
2 Not applicable

CARD # 2

COUNSELING: POR Item 12 D VCIP Institution ID ____________________

XI (Describe) Professional Assistance Available to Veterans (through OVA, Institution, and/or other agencies; direct service or referral)

A General

54 Counseling Services available or provided (no specifics given)

B Services Available and/or Provided

55 Personal (general) (leadership, adjustment, citizenship)
56 Family (general) (housing, welfare, pastoral, recreational)
57 Career (general) (vocational, testing, occupational)
58 Educational (general) academic
59 Financial (financial aid, economic, loans)
60 Legal, legal aid
61 Health (mental health, clinical, diagnostic, handicaps, health aids)
62 Veterans(VA, veterans counseling, benefits, dates, applications, etc.)
63 Job Placement (work-study, CETA benefits, job-training, employment)
64 Other (any other type of counseling avaliable)..............(ENTER SEPARATELY) ➤

C Response Quality

65 (
1 No Response to Section XI
2 Not applicable

XII Coordination of Counseling Services

A Nature of Activity (There is a clear indication that...)

66 {
1 OVA alone does all counseling, does not refer
2 Institutional staff and/or other agencies do counseling; OVA refers only
3 OVA provides services directly, and refers or coordinates

B Response Quality

67 {
1 No response to Section XII (or no clear indication of activity)
2 Not applicable

▲

CARD # 2

COUNSELING: POR Item 12 D VCIP Institution ID ____________

XIII (Cite) Number of Veterans Receiving Counseling Services

(any sort of counseling, by any source or agency)

A Unduplicated Total (precise figure or estimate)

68
- 1 None
- 2 1-99
- 3 100-499
- 4 500-999
- 5 1000 +

B Other

69 OVA says can't determine figure (for whatever reason)

70 Coder can't determine figure (for one quarter or semester only, duplicated, qualifications, overlap, partial, "25% of vets enrolled," etc.)

C Response Quality

71
- 1 No response to Section XIII
- 2 Not applicable

XIV (Cite) Number of Veterans Referred for Counseling Services

(to any agency, on or off campus)

A Unduplicated Total (precise figure or estimate)

72
- 1 None
- 2 1-99
- 3 100-499
- 4 500-999
- 5 1000 +

B Other

73 OVA says can't determine figure

74 Coder can't determine figure (for one quarter or semester only, duplicated, qualifications, overlap, partial, "25% of vets enrolled," etc.)

C Response Quality

75
- 1 No response to Section XIV
- 2 Not applicable

CARD # 3

PROBLEMS AND RESOLUTIONS: POR Item 13 VCIP Institution ID ____________________

XV Identify major problems encountered by OVA and explain how they were resolved.

A Problem A, VA-Related

6 Late, delayed, missent VA checks, and/or conflicting infor from VA, etc., (cause hardships to veterans and difficulties for OVA)

7 Resolution(s) for Problem A (mentioned, listed, explained)

B Problem B, VA-Related

8 No lists of recently-released vets from VA (or difficult to get)

9 Resolution(s) for Problem B

C Problem C, VA-Related

10 Time required and lack of OVA staff, to validate lists and attendance for VA (including enrollment verification, compliance surveys, etc.)

11 Resolution(s) for Problem C

D Problem D, VA-Related

12 Complex managerial and administrative requirements posed by VA; need to "protect" the Institution; coordinate VA and Institutional policy

13 Resolution(s) for Problem D

E Problem E, VA-Related

14 No approval for work-study placements (or difficult to get)

15 Resolution(s) for Problem E

F Problem F, VA-Related

16

17 Resolution(s) for Problem F

G Problem G, VA-Related

18

19 Resolution(s) for Problem G

REMINDER TO CODER: Example: Circle "6" if problem is indicated; circle "7" only if at least one solution to that problem is reported.

Card # 3

PROBLEMS AND RESOLUTIONS: POR Item 13 VCIP Institution ID ____________

(XV) Identify major problems encountered by OVA and explain how they were resolved

H Problem H, VA-Related

20

21 Resolution(s) for Problem H

I Problem I, VA-Related

22

23 Resolution(s) for Problem I

J Problem J, VA-Related

24

25 Resolution(s) for Problem J

K Problem K, VA-Related

26

27 Resolution(s) for Problem K

- - - - - - - - - - -

L Problem L, OVA-Related (internal, instutitional, local

28 Limited staff to do the job needed (any or all services/activities)

29 Resolution(s) for Problem L

M Problem M, OVA-Related (internal, institutional, local)

30 Overpayments to veterans; monitoring the payment process; paying VA workstudy veterans in advance; etc.

31 Resolution(s) for Problem M

N Problem N, OVA-Related (internal, institutional, local)

32 OVA staff turnover; replacement; retraining

33 Resolution(s) for Problem N

▲

CARD # 3

PROBLEMS AND RESOLUTIONS: POR Item 13 VCIP Institution ID ____________________

(XV) Identify major problems encountered by OVA and explain how they were resolved.

O Problem O, OVA-Related (internal, institutional, local)

34 Difficult access to records; inefficiency and error in enrollment verification

35 Resolution(s) for Problem O

P Problem P, OVA-Related (internal, institutional, local)

36 Not enough emphasis on related services (e.g., job placement, career/job orientation; testing; non-educational problems, etc.)

37 Resolution(s) for Problem P

Q Problem Q, OVA-Related (internal, institutional, local)

38 Staff (OVA, Institution) or outside agencies are limited in services they can provide or have limited knowledge of VA, benefits, regulations, etc.

39 Resolution(s) for Problem Q

R Problem R, OVA-Related (internal, institutional, local)

40 OVA activities not adequate, in areas of: information, recruitment, needs assessment, services, remedial, communications--or any of these--etc.

41 Resolution(s) for Problem R

S Problem S, OVA-Related (internal, institutional, local)

42 Identity and recognition of OVA; its place in Institution; etc.

43 Resolution(s) for Problem S

T Problem T, OVA-Related (internal, institutional, local)

44

45 Resolution(s) for Problem T

U Problem U, OVA-Related (internal, institutional, local)

46

47 Resolution(s) for Problem U

CARD # 3

PROBLEMS AND RESOLUTIONS: POR Item 13 VCIP Institution ID ____________________

(XV) Identify major problems encountered by OVA and explain how they were resolved.

V Problem V, OVA-Related (internal, institutional, local)

48

49 Resolution(s) for Problem V

W Problem W, OVA-Related (internal, institutional, local)

50

51 Resolution(s) for Problem W

X Problem X, OVA-Related (internal, institutional, local)

52

53 Resolution(s) for Problem X

Y Problem Y, OVA-Related (internal, institutional, local)

54

55 Resolution(s) for Problem Y

- - - - - - - - - -

Z Problem Z, Student-Related

56 Financial and other hardships caused to veterans due to Institutional policies on tuition payments, registration, credits, etc., etc.

57 Resolution(s) for Problem Z

AA Problem AA, Student-Related

58 Motivating students to take active interest in their educational development

59 Resolution(s) for Problem AA

BB Problem BB, Student-Related

60 Students often don't seek counseling on their own; results in more problems, discouragement, withdrawal from Institution

61 Resolution(s) for Problem BB

CARD # 3

PROBLEMS AND RESOLUTIONS: POR Item 13 VCIP Institution ID ____________________

(XV) Identify major problems encountered by OVA and explain how they were resolved

CC Problem CC, Student-Related

62

63 Resolution(s) for Problem CC

DD Problem DD, Student-Related

64

65 Resolution(s) for Problem DD

EE Problem EE, Student-Related

66

67 Resolution(s) for Problem EE

FF Problem FF, Student-Related

68

69 Resolution(s) for Problem FF

GG Other Problems

70 Any other problem (VA-related, OVA-related, or Student-related) which does not fit into the options outlined above. Circle "70" for any such problem, whether or not a resolution is indicated. Ignore resolutions.

HH Other types of response (general). NOTE: If one of these variables applies, then no variable from 6 through 70 can be marked above)

71
- 1 Mentioned ONLY problem(s) and solution(s) for period OTHER than 1975-76
- 2 Mentioned ONLY minor problems and so designated them
- 3 Stated that there were NO major problems (or no problems)

II Response Quality

72
- 1 No response to Section XV
- 2 Not applicable

CARD # 4

POR Item 14

VCIP Institution ID ____________________

XVI Coordinator's Highest Educational level

A Educational Level

6
1 Less than BA (associate degree, high school, college incomplete, etc.)
2 Bachelors
3 Masters
4 Doctoral
5 Other educational level

B Response Quality

7
1 No response to Section XVI
2 Not applicable

XVII Coordinator's Qualifications

A Qualifications, General

8 "Is qualified" or other such statement, no specifics provided

B Specific Types of Qualification for Coordinator Role

9 Public Relations training/experience
10 Management, administrative training/experience
11 Guidance and counseling training/experience
12 Has worked in helping professions, community work
13 Worked for VA or with veterans, knowledgeable of veterans needs
14 Worked in several capacities in the military
15 Other types of qualifications ....(ENTER SEPARATELY) ►

C Response Quality

16
1 No response to Section XVII
2 Not applicable

XVIII Veteran Status(Vietnam Era or any era)

17
1 Yes, is a veteran (or clearly implied is a veteran)
2 No, is not a veteran
3 Response given, but cannot determine whether veteran or not (not clear)

B Response Quality

18
1 No response to Section XVIII
2 Not applicable

▲

CARD # 4

POR Item 14

VCIP Institution ID ____________________

XIX (List) Major Responsibilities, Duties of Coordinator

A General

19 Statement that duties are performed, etc., but no specifics

B Direct Participation in

20 Outreach
21 Recruitment
22 Counseling
23 Special Education, Tutoring
24 Financial Aid, Benefits, Veterans problems
25 Registration, Grades, Transcripts, student records, other such functions
26 Job Placement, interviews, training
27 Referral (to various other agencies)
28 Teaching
29 Other direct participation

C Supervision and Monitoring

30 Supervise staff
31 Supervise/coordinate staff training
32 Supervise recruitment
33 Direct outreach efforts
34 Establish special ed, tutorials
35 Work-study students
36 Counseling functions of all sorts
37 Referral
38 Other supervisory functions

D Communication

39 Develop and use advisory committee
40 Keep informed of all sorts of matters
41 PR and information services
42 Maintain liaison with community or service area
43 Maintain liaison among institution and VA, HEW, other OVAs, Regional VA, Institution's veteran representative
44 Maintain liaison with instructional staff
45 Other communication responsibilities

E Program Management

46 Plan and implement total program
47 Conduct business: application, fiscal, reports, attendance, OVA evaluation, verification, etc., re VA and Institution
48 Coordinate provision of services of institutional units (departments, administration, counseling, financial aid, placement, admissions)
49 Other overall management functions

F Response Quality

50 (
1 No response to Section XIX
2 Not applicable

CARD # 4

ACCOMPLISHMENTS: POR Item 8 VCIP Institution ID ____________

XX Indicate Why Veterans are effectively Served ("We are effective because...")

A General
51 Positive response implicit in Item 8, but no specifics provided

B OVA Office and Staff
52 OVA office central to campus, visible, accessible, has private counseling space
53 OVA has large and qualified staff (including volunteers) either directly in OVA or at its disposal in the Institution
54 OVA staff all or mostly all veterans (or Vietnam-era veterans)
55 Other office and staff

C Qualities of OVA
56 OVA is responsive and flexible (hired special evening staff, office is open more hours, arranged for reading lab, etc., etc.)
57 OVA has worked to solve problems as they come up (administrative, personal)
58 OVA has taken on advocacy role for veterans
59 OVA serves liaison role between vets and VA; OVA and VA; Institution and VA, etc
60 Personalized service delivered by OVA
61 Other OVA qualities

D Outside Agencies (outside the OVA)
62 Excellent (or good) cooperation and interaction with VA and/or HEW
63 Excellent (or good) cooperation from the Institution (general)
64 Excellent (or good) cooperation with and from other agencies of all sorts
65 Functioning and useful advisory committee
66 Personalized education offered by Institution
67 Other relative to outside agencies

E OVA Basic Services
68 Strong Outreach activity (on campus and/or in service area)
69 Strong Recruitment activity
70 Strong Special education activity
71 Strong Counseling activity
72 Strong referral system within Institution to meet all sorts of needs
73 Strong referral system outside Institution to meet all sorts of needs
74 Other OVA basic services

F Response Quality

75 (1 No response to Section XX (as to why veterans effectively served)
2 Not applicable

▲

CARD # 5

VCIP Institution ID ____________________

(XXI) Selected OTHER Material in POR

This grand category is meant to pick up miscellaneous comments relevant to VCIP operations or outcomes and related to the specific variables enumerated. These may relate to practices, successes, effects, or policy.

A Outreach

6 Budget constraints have meant fewer contacts or contacts only on campus
7 When vets have needs other than education, we service and/or refer
8 We work with a (nearby) Upward Bound project
9 Sizable or satisfactory % of vets contacted have enrolled in Institution
10 Best approach is to contact those who (normally) come in contact with vets
11 We train a special group of outreach workers
12 Other Outreach ....(ENTER SEPARATELY) ➤

B Recruitment

13 Outreach and Recruitment viewed as overlapping functions, procedures
14 Vet recruitment integrated into total Institutional recruitment
15 Meet with OVA colleagues elsewhere to discuss strategies
16 Other Recruitment ....(ENTER SEPARATELY) ➤

C Special Education

17 Those who need (fulltime) remedial work are referred off-campus (GED, UB, community college)
18 Students can cross-register at this Institution and others
19 Sizable or satisfactory % of vets in Special Ed have been retained in the Institution, or have enrolled after completing off-campus remedial work
20 Vets share same remedial training/resources as all other students; no "special" arrangements made or needed
21 VA Sections (Tutorial Benefits) have not been promoted or encouraged on this campus, or have been actively discouraged
22 Other Special Education ....(ENTER SEPARATELY) ➤

▲

CARD # 5

VCIP Institution ID ☐☐☐☐☒☒

XXI Selected Other Material in POR

D Counseling

23 Students required to review program (course load, goals, sequence, etc.) Prior to certification for veteran benefits

24 Placement tests automatically given

25 OVA has time/staff to give career/personal counseling to non-student veterans

26 Institution's counseling office has "veteran's counselor"

27 Vets are automatically counseled on a scheduled basis (frequently, 2-3 times per semester or year, at intake and at end of semester, or similar)

28 Other Counseling..(ENTER SEPARATELY) ►

E Institutional Commitment, Activities, Policy Changes, Etc.

This requires subjective assessment as to the "quality" of what may be regarded as evidence of institutional commitment. The actual content, or the strength of the statement made (most likely in Item 8), may serve as a clue as to what should be noted.

No specific material is indicated here, and no codes are to be circled except as indicated below under General.

General

29 Any comment relating to "institutional commitment".........(ENTER SEPARATELY) ►

F Response Quality

30 No response to Section XXI (that is, no selected other material re the four service areas, and no comments re institutional commitment)

▲

Coder #--

Completed- / /78

USE THIS PAGE TO ENTER SEPARATE CONTENT FROM VARIOUS SECTIONS WHERE "Enter Separately" IS INDICATED.

Only a master copy of this sheet is provided so that it can be used for material related to any page in the coding guide. Be sure to enter page number, Section (Roman numeral), and Category (capital letter) for every different place where "Enter Separately" is indicated.

REMINDER: When you find material that must be written in here, you must also code (circle) the appropriate digit on the coding sheet. For example, on page B-4, Section V, Category C, if there are "other outcomes" to list, first circle the digit 79, and second, write in the content on one of these pages.

Enter content in brief but clear form. Be sure to check with Supervisor the first few times you think it is necessary to enter content in this way. The general rule is to try to fit content into the existing subcategories; where this cannot be done, then use this other procedure.

Enter Page, Section, Category, and Code to the right; this will make for easy reference as you flip back and forth as you are coding different PORs.

Legible handwriting please!

1. ____

2. ______________________________________

3. ___________________________

4.

5.

Page
Section
Category
Code

C. General and Specific Directions for Coding VCIP PORs

Every effort has been made to insure that these directions cover all possible questions and that they are self-explanatory. However, given the nature of the coding task with extensive and related paragraph material, it is likely that questions will come up even after coding 50 PORs. Do not hesitate to contact the Coding Supervisor when such problems and questions develop.

Because of the complexity and extent of the task, there are many general directions that apply to the total task, as well as specific directions for the individual Sections. All directions are essential to a complete and accurate handling of the coding task.

1. General Directions

(a) For at least the first 15 cases, it is important that you read the complete POR before doing any coding, in order to develop (1) a sense of the OVA and Institutional context and (2) an awareness of the amount and kind of repetition as well as overlap. To some extent (for example, all 4 parts of POR item 12), it will be important to do this quick reading with all cases. This will save later frustration, confusion, erasure, and so on during the coding process itself.

(b) One coder will work with all items in each assigned POR. Because of content repetition and overlap, coding the POR cannot be shared in any way; it is a one-person job.

(c) The sequence of coding POR items is dictated by the list of topics and categories (Section B in this guide). The sequence is:

Item 12A
B
C
D
Item 13
Item 14
Item 8

(d) There are certain exceptions with respect to "coverage" of content in the POR Items.

(1) Note that item 15 is omitted entirely. (2) Only a portion of Item 8 is to be considered in coding for Section XX, namely the second half of the direction (dealing with "reasons why veterans were effectively served"); in other words, no "accomplishments" per se are to be coded. (3) Item 12A omits "total number of veterans contacted." (4) Item 12D omits the coding of "counseling strengths and weaknesses."

(5) Item 13 omits detailed coding of the resolution(s) of identified problems. (6) Item 14 omits coding of the director's "title" and full-time or part-time status. It is important to keep these exceptions in mind so that no effort is wasted trying to fit them into existing codes and so that attention is focused on the critical topics and categories. In all the cases listed here, both the item directions and the item content are to be ignored in the coding task.

(e) Thus, with few exceptions, the task is to code only what has been included in the coding guide. Decisions have already been made as to what should be specifically identified -- any other material is "irrelevant" to the coding task at this time. In most cases, such content is to be simply entered as "Other" within the given categories that already exist. For POR Item 13, Section XV, there is an exception: new problems are to be added (only by the Coding Supervisor on the master list, after discussion with the individual coder).

To repeat: we are coding selected topics, categories, and variables -- not all the detail that is reported in the POR.

(f) In most instances where "Other" is to be coded within categories, there are two steps involved. First, circle the number for the "Other" variable. Second, on the appropriate separate sheets, list (in the briefest clear way) the content which is covered by "Other." This second step is cued by the words ENTER SEPARATELY that appear on the coding sheet. No frequencies are to be noted -- only the fact of the additional content. The supervisor will aid in determining the sorts of content to be handled this way.

An example for using the "Other" variable when this is called for.

Page 3
Recruitment: POR Item 12B
Section IV . . . .
A General
B Indirect
C Direct Contact
[✓ 55] ____
[✓ 56] ____
57 ____
____
____
64 ____
[✓ 65] Other Direct Techniques. . .
(ENTER SEPARATELY) ➤ (see p. C-3)

Circle 65 and on the separate sheet write in: "Visit selected vets in VA or other hospital"

(g) We must code the content onto the form regardless of which POR item it appears in. This will be perhaps the most difficult direction to apply, since you must expect to find overlap among items. For example, various inputs to be coded in Sections I to VI may appear in POR Item 12A or Item 12B, or in both. Similarly, most content for Section XV will come from POR Item 13, but it may also appear in Item 12D (related to certain counseling weaknesses) or in Item 8. In other words, the POR Items are shown on the coding sheet only as a guide to aid you in working through the material. You must be prepared to find codable material for the various Sections almost anywhere in the POR.

It will take some practice to see how this works and how to handle it. One suggestion, as an example: When coding content for 12A (Outreach), and you find material that belongs in Section XI (Counseling), mark 12C or XI in the lefthand margin of the POR as a clue for later coding. However, you must be sure to go back through the POR to look for these notes to yourself and check them off as they are coded in the appropriate sections.

Further detail is provided for each individual Item and Section under "Specific Directions."

(h) To be valid, a piece of information must relate to the 1975-76 program year. Where no dates are indicated, we assume 1975-76. However, if the information clearly relates to some other year, code as Not Applicable (or, in some cases, as Coder Cannot Determine).

(i) All code entries are to be made on the separate "booklets"-- one for each Institution. Do not enter codes on the POR except as an aid to yourself in handling the content (especially where overlap is involved).

(j) Be sure to enter the VCIP ID onto each sheet, using the first 4 digits of the 6-digit ID. The ID appears on upper right of the POR in large handwritten figures (not typed).

(k) Ignore most attached material and anything labeled "Attachment Two." We are working only with the POR and Attachment One. However, a vita or job description may be attached (relative to POR Item 14) and these should be considered as part of "Attachment One."

(l) The arrrow at the bottom of the page points to the column of numerals that are eligible to be coded by circling. Wherever a series of numbers appears within a lettered category, as in:

B
19 . . . .
20 . . . .
21 . . . .
22 . . . .

any or all of these may be coded (circled) depending on the content being analyzed. This amounts to a direction, "Circle all that apply."

Wherever brackets are used, as in:

$$\underline{67}\left\{\begin{array}{l}1\ .\ .\ .\ .\ .\\2\ .\ .\ .\ .\ .\\3\ .\ .\ .\ .\ .\end{array}\right.$$

this signifies that only one numeral may be circled (the 1, the 2, or the 3). In this case the variable number (67) is only a sign; it may not be circled. In other words, the entries for 1, 2, 3 are mutually exclusive and only one may be coded.

(m) Each circle must go around only one number, even where successive variables are to be coded.

Right . . . . ㊼
㊽
49

Wrong 47
48
49

(n) Use a red pencil whose lead is easily erasable; erasures are inevitable in this kind of coding work.

(o) Given material is to be coded only once. You should expect to find some content repeated in the same POR Item or across POR Items-- but once a given code is used, ignore any repetitions.

(p) We must accept all information in the POR at face value. There is no way to clarify or verify what is in the 1975-76 annual report. This includes the implicit definitions used by the Institutions. However, where there are obvious contradictions in the POR, we must enter under Not Applicable, Other, or Coder Can't Determine, depending on the particular Section involved. Consult the Supervisor.

(q) As a final check, be sure that every Section (I to XXI) has at least one code marked. In some cases this will be a subcategory entry such as "Mailings to other groups"; in other cases this will be a choice under "Response Quality" -- either No Response or Not Applicable. Each Section must have at least one code marked.

Please conduct this final check for each Institution as you complete its POR. Remember, though, that there are other check points on this procedure. As examples:

- For Section I, if you circle choice 6 under Category A, then no other code may be circled in that Section.
- For Section I, if you circle either 1 or 2 under Category D, then no other code may be circled.
- For Section XV, if any problem from A to GG is circled (one that is now on the coding sheet or one that is added by the Supervisor), then there can be no code circled in Category HH or II.
- For Section XIII, if you circle any code in Category B, then nothing can be coded under Category A or Category C.

Each Section ends with the category "Response Quality." If 1, 2, or 3 is circled here, (that is, in effect no response), then the Section is complete and no other variables can be coded.

(r) Note that "small institutions" are not required to engage in Outreach or Special Education activities. Some will say as much, calling for a code of Not Applicable in Sections I-III and VII-X. Others will skip all reference to POR Items 12A and 12C, in which case code No Response for all these Sections.

However, some Institutions may report certain activities even though they are "small" and say so. If so, code all the appropriate content in these Sections.

(s) No Response always means no content anywhere in the POR for the given Section, thus in effect a blank. Note: As an example, however, 12A may indeed be blank but content related to Section I-III may appear elsewhere; if so, the content must be coded in Sections I-III. Another example: An Institution may leave all POR Items blank except for Item 8; if so, draw all possible content from Item 8 and code it in the appropriate Sections.

(t) Read and reread these general directions, looking at the POR and the coding booklet as you do. It will all "come together" with a little experience! Good luck.

2. Specific Directions

Separate directions are given here for each Section as related to the various POR Items. Where already covered under General Directions, they will not be repeated here.

(a) Section I, Procedures Used to Assess Needs
Content will come mainly from Item 12A, but may also appear in Item 12B (because of overlap between Outreach and Recruitment), Item 14 (as part of the Coordinator's responsibilities), and Item 8 (as listed as an "accomplishment.").

If code 6 applies, no other code may be circled. Valid response may be something like, "We assess needs and interests, using several successful approaches" or "OVA does what the Regs require."

Reminder: Ignore content related to specifying the total number (or any number) of veterans contacted.

(b) Section II - same as in (a) above

(c) Section III - same as in (a) above

Category C is an umbrella variable for any means of identifying the veteran population other than use of name lists (Category A) or direct contact with veterans (Category B). Where there are "other" sources for name lists, the final variable in Category A is to be used (36); the same applies to Category B (variable 41) as to other types of personal contact.

(d) Section IV, Recruitment Procedures
Content will come mainly from Item 12B, but may also appear in Item 12A, Item 14, or Item 8.

If code 44 applies, no other code may be circled. ("We use several ways to recruit our students" or "Recruitment occurs throughout our 7-county service area as well as on the campus").

Note that codes 45 and 55 are also "general." That is, they will be used where respondent writes "Our recruitment is done through many publications or other media" or "We do a lot of direct contact work with veterans." If code 45 is used, no other code can be circled in Category B; same with code 55 in Category C.

(e) Section V - same notes as in (d) above. If code 67 is used, circle no other variables.

(f) Section VI - same notes as in (d) above. If code 6 is used, circle no other variables.

(g) Section VII, Coordination of Special Education
This is somewhat inferential in nature. Given all the information in Item 12C, determine whether any code 1, 2, 3 in Category A applies. If not, or if simply not clear, use code 1 in Category B. It is very likely that No Response will be used in a majority of cases.

(h) Section VIII, Available Special Education Services
Content will come mainly from POR Item 12C, but may also appear in 12D, 14, or 8.

Accept whatever listing is reported-- whether of services available, services directly supplied by OVA or Institution, or services coordinated or referred to.

Code 20-- same principles as outlined above for the whole section. Codes 21, 30, 35-- same principles as above for the separate Categories B, C, D.

(i) Section IX, Number of Vets Receiving Spec Ed Services
This applies to total number receiving special education of any sort, at any location, from any source-- and either including or excluding those to be cited in Section X. Use whatever total is given, so long as it is clearly an unduplicated total, whether a precise figure or an estimate.

OVA may report that it cannot determine a total (code 46), or you may find that you can't ascertain a total (code 47)-- see list of possibilities on the coding sheet itself. If 46 or 47 is used, no other code may be circled.

In some cases, POR may report several separate figures for separate special education activities. If you can determine that duplication is not involved, then add the figures to derive a total.

Be sure to distinguish between None and No Response. "None" is an actual figure reported (none or zero); "No Response" means no information at all. If POR says "We don't encourage use of VA sections" or "We did last year, but not this"-- code as No Response since no figure was provided.

Some will give a verbal instead of numerical response. Using the ranges shown on the coding sheet, translate such words as "few" or "many" into the best possible code.

(j) Section X, Number Served Under VA Sections
See (i) above for relevant directions.

"VA Sections" refers to special ed or tutorial services under certain VA authorizations (1691, 1692, 1696). Some PORs will detail the three VA sections (enter these and also derive total); others will give a total only (enter No Response for the three VA sections, and code for total). The POR may report for Category A, B, C, D or any one or combination of these.

As with (i) above, report only unduplicated counts (precise or estimated); be prepared to find that total cannot be determined; translate verbal into numerical terms if necessary; distinguish None and No Response.

(k) Section XI, Available Counseling Assistance
Content will come mainly from POR Item 12D, but may also appear in 14 or 8 in other parts of 12.

Code any type of counseling listed in POR, either available or used, in any agency, direct service or referral. Assume that all are "professional" unless POR clearly says otherwise; in case of the latter, do not code.

Reminder: Ignore content related to strengths and weaknesses of the counseling services so far as special codes go. However, if weaknesses are worded so as to be interpretable as problems, enter into Section XV or contact Supervisor for creation of new code in Section XV.

The lead words in each variable in Category B are underlined (Personal, Family, Career, etc.) with examples in most cases. Attempt to enter all content into these codes, leaving as little as necessary for code 64 (Other).

(l) Section XII, Coordination of Counseling Services
Given all the information in Item 12D, determine whether code 1, 2, 3 (Category A) applies. If not, or if simply not clear, use code 1 in Category B. No Response will likely be coded in the majority of cases.

(m) Section XIII, Number of Vets Served in Counseling
Code total given, for unduplicated count of veterans receiving counseling services --of any sort, at any agency, by any source, precise or estimated figure. Note that this total may include referrals as well as those directly served.

POR may state, "450 counseling sessions (or contacts) were conducted; many veterans had both academic and personal, and some were also referred to outside agencies such as employment, welfare, or other." This shows that the total given refers to number of contacts, not number of veterans; actual total of vets could be 287 or 366. Thus, this will be interpreted as a duplicated count and coded as 70.

(n) Section XIV, Number of Veterans Referred (Counseling)
This will be (should be) a subset of the total given in Section XIII. Must be a total of veterans referred; and again, must be the number of veterans-- not the number of referrals. If the latter is given, consider this a duplicated count and code 74.

(o) Section XV, Problems and Resolutions
Content will come mainly from POR Item 13, but may also be located in Item 8, Item 16, or Item 12D (see (k) above).

Problems are divided into three "types" and each category from A through FF is so labeled. A problem may be related to the VA; the OVA functioning in the Institution; or the Veteran Student. Study the problems already identified to get a sense of how the three types are different.

Blank categories are included in the event that new separate problems are identified. Do not enter these directly; contact the Supervisor who will make the decision and make entries on the master sheet. Then such problems may be coded on your coding sheets.

Reminder: Ignore the specific nature of resolutions (attempted or successful) for the problems identified. However, you are to code the fact or existence of reported resolution(s) for any given problems. As shown in the page 10 example, code 6 if the problem is indicated; code 7 if any resolution to that problem is reported and is clearly something already tried or completed (not a plan for future action or merely a suggestion).

It is possible that the blank spaces for a given problem type will all be used. If so, see Category

GG (Other Problems) on page 14, and code as 70 any additional problem type with no regard to resolutions.

Note Category HH. If any of the codes applies (and only one can apply), then nothing else in Section XV may be coded. Notice the adjectives ONLY and NO.

(p) Section XVI, Coordinator's Educational Level
Content will come from POR Item 14 or possibly an attached vita.

Reminder: Ignore content related to Coordinator title or employment status (part-time or full-time).

For this Section and all others making use of POR Item 14, "coordinator" is whatever person is described here, regardless of title or other status. In some cases (where there was turnover during the 1975-76 year), two or even three coordinators may be referred to. If so, attempt to identify the most recent person and enter data for him/her. Item 14 may make this clear. If not, see if there is a match between name given in POR Item 6 and any data in Item 14. If nothing works, then codes for Not Applicable must be circled (Sections XVI to XIX).

(q) Section XVII, Coordinator Qualifications
Particulars are covered in General Directions and in (p) above. Possibly an attached vita.

(r) Section XVIII, Coordinator Veteran Status
Particulars are covered in General Directions and in (p) above. Possibly an attached vita.

(s) Section XIX, Coordinator Major Responsibilities
Particulars covered in General Directions and in (p) above. Possibly an attached job description, which may be used so long as there is some statement or clear implication that all those duties (or some given set of them) were performed.

Reminder: Some content in POR Item 14 may also need to be coded in 12A-D. If Item 14 notes that one of the coordinator's jobs is to "arrange for special education services" but Section VIII, page 6, is coded 1 under Category F... then a change must now be made: erase this code 1 for No Response and circle code 20. (Please check page 6 now to see how this applies).

(t) Section XX, Why Veterans Are Effectively Served
Content will likely come only from POR Item 8. A certain amount of inferring may be required to decide whether any "reasons" are given in Item 8. Remember that the content codable for Section XX

must amount to a reason, an explanation, completing the statement "(We) (OVA) (The Institution) is effective because or because of..."

Reminder: Ignore "accomplishments" per se; there is no place to code them and they are not to be entered into Section XXI.

Reminder: Item 8 (any part of the full response) may also identify problems (to be coded in Section XV) and actual service activities (to be coded in Sections I-XIV, as applicable). If so, read directions for those Sections carefully, since the same definitions, procedures, and restrictions apply regardless of where the information is located.

(u) Section XXI, Selected Other Material
Categories A, B, C, D relate to the four service areas. Material of the sort already listed should give a sense of the kinds of additional entries to be noted under "Other" (codes 12, 16, 22, 28). Check with Supervisor if necessary. There is much additional material that you will encounter but should not enter because it is highly detailed or not related to program operations and outcomes.

Examples of the sort of content to ignore are:

- size of Institution, population of area, size of veteran group at the Institution
- findings from surveys conducted
- definition of service area
- plans to change practices or services in future
- nature of coordination process
- how instructors "cooperate"
- how financial aid is obtained
- content of a "study skills" course
- number of hours per day or week that service(s) are offered
- time of day when OVA open
- information about staff members other than coordinator
- frequency of contact with other agencies
- amount of funding needed or wanted, increase in funding, application process details, line item changes, etc.
- recommendations of any sort
- personal involvement of OVA coordinator in veterans clubs or outside advisory groups
- year of VCIP initiation
- listing of VA regulations of various sorts
- "complaints" as opposed to OVA problems

Category E relates to a somewhat elusive concept, Institutional commitment (to OVA, to veterans), as most likely contained in POR Item 8. Code 29 if there is some statement that shows such commitment, policy changes, program activities, etc. Enter the specifics separately on the appropriate sheet for later perusal. In this one case, please do not be brief in indicating the content-- write enough that the policy, practice, or activity is clear and can be studied for meaningfulness. See Supervisor.

C. Suggested Revisions to the Coder's Guide/Categorization Manual

In actual practice, the Guide/Manual was revised somewhat as the work proceeded; and it is this experience which underlies the changes recommended here. For example, it was found early on that the proposed training procedure was not sufficient; thus it was amplified on the spot with all coders. Similarly, as the work progressed, it was possible to add to or alter the wording of certain categories/variables in order to help clarify the task subsequently. In like vein, for purposes of correct coding, it was necessary to add and code variables (under Problems and Resolutions), and to include lists of "codable variables for which no preset code existed." In the case of the latter, the intent was to explore and report possible additions to the variables list for future use, regardless of frequency, and to suggest their inclusion since they turned up at least once in the present study.

All of the above are included in this section, based upon the total RTI experience with the Guide/Manual. In all cases, page and category references are provided so that the material here can be directly related to the content of the Guide/Manual as originally developed.

1. Additions to the Training Procedure

Coders should be aware of these additional steps as much as of the original proposed training steps. It may not be necessary in a future Guide/Manual to include the rationale for additional steps, however, since those points are more appropriately addressed to the trainer/supervisor. Actually, much of what follows is pertinent to the last statement on page A-4 of the Guide: "...Supervisor... will arrange procedures for resolving additional problems as they come up."

(a) (Page A-2) Before each coder works through two PORs on his/her own, the group will review and code a given POR together. Copies of the same POR will be distributed to each coder. Coders will be instructed to read a section of the POR, read the specific directions for that section, carefully review the codes for that section, and code the section on their own. The supervisor will then read the POR response aloud and ask coders to specify how particular aspects were coded. Codes for the section will be discussed and the supervisor will indicate why particular codes are correct and why other codes are in correct.

Coders will thus learn how to depend on the specific directions and how to make distinctions between codes that may appear similar unless carefully read. Coders will also have a basis for asking questions about codes that are confusing to them.

(b) (Page A-3) After each coder finishes the first 2 PORs, he/she and the supervisor will review the coding in detail. In this manner the supervisor may answer questions in the context of a real situation and may aid in interpretation of the coding process.

(c) (Page A-3) After each coder completes the first two PORs, he/she will be given 10 PORs to code. After each coder finishes each of the 10 PORs, he/she will hand the POR to the supervisor for review. The supervisor will review each of the 10 PORs, note problems in interpretation, and discuss any problems with the coder. The coder can continue coding on another POR until the supervisor has completed the review and is ready to discuss coding problems in relation to the POR just reviewed.

(d) (Page A-4) The supervisor will note common problems in procedure after reviewing each coder's first 12 PORs. The supervisor will then briefly review problems in procedure with the group.

(e) (Page A-4) The supervisor will then review each of the next 10 PORs for each of the coders. Problems in coding will be noted on a sheet of paper for each coder. The supervisor will discuss these general problem areas with each coder after the review of the entire set of 10 PORs (rather than discussing the problem areas after the review of each of the 10 PORs as done previously). There is no general review of problems with all coders unless a majority of the coders appear to be making the same type of misinterpretation of data.

(f) (Page A-5) For each coder, the supervisor will review every 10th POR for the next 50 PORs that the coder completes. The supervisor's review will focus on areas that have previously appeared to be a problem for that coder, as a means of continuing quality control.

2. Estimation of Coder Time

Based on RTI experience, with coders new to the POR content, the first two PORs will take approximately 45 to 50 minutes each to complete. (Some PORs of course are very short, and would require much less time; it is recommended that all of the first 10-12 PORs be on the long side to serve the training purpose.) An additional 30 minutes for each POR is needed for review with the supervisor. The next 10 PORs will take approximately 40 minutes each. An additional 2 hours is needed for a detailed review of the 10 PORs with the supervisor.

The remaining PORs will take anywhere from 10 to 30 minutes to complete, with an average of about 20 minutes (taking into account the length of PORs).

3. Summarization of Additional Entries

At specified points in the Guide, coders were asked to write onto separate sheets any content entries that were relevant and topical but for which there were no specific variables to code. They were to do this regardless of frequency over the total batch of PORs coded. In each case, the clue was the direction, "Enter Separately," which always appeared on the right-hand side of the coding page. Considering that 400 PORs were coded, it appears that there were few such additional entries; all such entries are listed below by page, section, category, and code number.

The purpose of reporting these entries is to suggest their inclusion in any formal revision or utilization of the Guide/Manual specific to VCIP PORs--with one exception. That exception is the final set of entries relating to "institutional commitment." There were so few entries, and the concept was so difficult to operationalize, that RTI suggests this category/variable be dropped; it should also be noted that no POR item asked for evidences of such commitment. It was included in the Guide as a long shot, anticipating that Item 8 might draw useful response for this variable.

Page B-1, Section 1, Category B, code 19
(1) Test results used to determine areas of need
(2) Needs determined through Vet newsletters/school newspaper
(3) Needs determined through suggestion boxes

Page B-1, Section I, Category C, code 23
(1) VA newsletter consulted for results of vet needs survey
(2) input from community advisory group

Page B-2, Section II, Category A, code 29
(1) Computer information services
(2) Counseled vets during summer to assess interest in academic program
(3) Used mobile van to perform outreach

Page B-2, Section III, Category A, code 36
(1) Lists from community agencies
(2) Lists of vets received through the mail, by telephone, through personal contact--no indication of who supplied list

Page B-4, Section V, Category B, code 73
(1) Referrals made by local agencies

Page B-5, Section VI, Category B, code 13
(1) Lack of veteran response
(2) Rural/widespread area, hard to reach vets
(3) Application deadline pushed back 2 months--hampered recruitment

Page B-5, Section VI, Category C, code 16
(1) Vet counselor made available in evenings
(2) College vans with outreach workers
(3) Visiting clubs and civic organizations

Page B-6, Section VIII, Category B, code 29
(1) Prevocational program with behavior modification techniques

Page B-6, Section VIII, Category E, code 43
(1) Services for the handicapped (hearing impaired, blind)

Page B-8, Section XI, Category B, code 64
(1) Consumer counseling

Page B-15, Section XVII, Category B, code 15
(1) Graduated from NCO Academy
(2) SCT Degree

Page B-18, Section XXI, Category A, code 12
(1) Institutional restriction on enrollment of new vets
(2) OVA part-time advisors and volunteers at referral agencies

Page B-18, Section XXI, Category B, code 16
(1) Institutional restriction on enrollment of new vets

Page B-18, Section XXI, Category C, code 22
(1) Vets among best students--don't need special education

Page B-19, Section XXI, Category D, code 28
(1) Peer counselors
(2) VA narrower policy prohibitive to retaining vet counselor on campus

Page B-19, Section XXI, Category E, code 29 (Institutional Commitment)
(1) Institution provided funds, secretarial services, use of university computer, office space, equipment, means of communication
(2) Institution plant department constructed curb ramps and parking areas for handicapped vets
(3) Outreach program "had strong institutional support"
(4) Negotiated policy and program changes in University (no specifics)
(5) Night school coffee break room for vets was provided by the institution
(6) Classes scheduled so vets remain in same room for all classes

4. Specific Changes in Coding Guide

The suggested changes outlined below are based on RTI experience with the Guide/Manual, especially the wording of topics, categories, and variables. Each entry is listed by page, Section, Category, and code number. Each entry should be read as following the statement, "Recommend this be changed to..."

Page B-2, Section II, Category A, code 27:
Interviews, walk-in contact, other personal or direct contact

Page B-2, Section III, Category B:
Direct contact with vets FOR PURPOSE OF IDENTIFYING VET POPULATION

Page B-5, Section VII, Category B, Code 1: Separate into two elements:
No response to Section VII
No clear indication of sponsor of Special Ed activities

Page B-5, Section VII:

(Place this at end of all Spec Ed topics)

Page B-6, Section VIII, Category B, code 21:
General (absolutely no subject areas named)

Page B-7, Section IX, Category C, code 45, option 3:
(Subsume this option into code 47 in this Section)

Page B-7, Section X, Categories A, B, C: Add clarifying terms as follows:
A Section 1691 (VA-funded remedial)
B Section 1692 (VA-funded tutorial)
C Section 1696 (PREP)

Also note in directions (page C-8) that respondent may not use VA number (e.g., 1692) but only the words (Remedial, or VA Remedial). Even so, this sort of direction cannot cover all the ways a respondent may choose to identify numbers served.

Page B-8, Section XII, Category B, code 1: Separate into two elements:
No response to Section XII
No clear indication of sponsor of counseling services

Page B-10, Section XV, Category F, code 16: Insert:
Limited funding; funding cut

Page B-10, Section XV, Category G, code 18: Insert:
Delimiting date results in fewer vets, or in more vet problems

Page B-12, Section XV, Category T, code 44: Insert:
Bad location of OVA; inaccessible to vets; inadequate space; etc.

Page B-16, Section XIX, Categories B and C: Combine under one heading:
Participation in and/or supervision of...

Page B-16, Section XIX, Category D, code 44:
Maintain liaison with instructional and/or institutional staff

Page B-17, Section XX, Category, B, code 53:
OVA has large and/or qualified staff...

Appendix E

Sampling Procedures

Appendix E
Sampling Procedures

This appendix details the sampling procedures used in drawing the various samples of institutions for the VCIP evaluation. The five following sections of the appendix address five discrete areas of that sampling: (a) the basic sample, (b) the reliability subsample, (c) replacement procedures, (d) estimation procedures, and (e) expected standard errors.

A. The Basic Sample

The sample design used to select a sample of 400 institutions was a form of stratified random sample providing each eligible institution with an approximately equal chance of selection. A sample of 400 was considered sufficient to provide adequate precision for the quantified indices derived from the qualitative data. The sample also allowed separate estimates by type of support: public, private; by three types of institutions: University, four-year college, two-year college; type of grant: initial versus renewal, and by two sizes of Category I veteran student enrollment and Category II veteran student enrollment. Separate estimates and the corresponding sampling error for these reporting variables allow the determination of significant differences between the above reporting variables in either the quality of the data and the data itself.

1. Target Population

The target population consisted of 1,206 postsecondary institutions funded by the VCIP for the academic year 1975-76, as represented by the data provided on one or more of the USOE Forms 269, 269-1, 269-2, 269-3, or otherwise included on the USOE Student Financial Aid Master File (SFAMF) as reflected in entries on the VCIP data tape.

2. Construction and Stratification of the Sampling Frame

The frame was constructed using the VCIP data tape for the academic year 1975-76. For each of the 1,206 institutions, the USOE region code, the type of support, the type of institution, the grant award status, Category I veteran enrollment, and Category II veteran

veteran enrollment were determined.[1] These variables were used to stratify the frame. The sample sizes were considered sufficient to report results separately within the levels of each of the above variables, excepting region. In about half of the USOE regions, the sample sizes were projected to result in sampling error estimates of 5 percent or larger when p = 50 percent.

The frame was ordered by public- versus private-supported institutions. Within type of support, the frame was again ordered by type of institution (university, four-year college, and two-year college), and within type of institution the frame was further ordered by type of grant into either initial grant or renewal. Within the type of grant ordering, institutions were ordered by the size of the Category I and Category II veteran enrollment. Four enrollment classifications were determined in such a way that about one-fourth of the frame's 1,206 institutions were included in each enrollment class. The enrollment classes and number of institutions in each class are indicated in Table E.1.

Table E.1

Enrollment Classes used in Stratification

Enrollment Class Code	Range of Category I and Category II Veteran Enrollment	Number of Institutions on Frame
1	250 or fewer Category I veterans and 25 or fewer Category II veterans;	330
2	more than 250 Category I veterans and 10 or fewer Category II veterans;	260
3	500 or fewer Category I veterans and more than 25 Category II veterans or between 250 and 1,000 Category I veterans and between 10 and 50 Category II veterans;	304
4	more than 1,000 Category I veterans and more than 10 Category II veterans or more than 500 Category I veterans and more than 50 Category II veterans.	312

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[1] RTI had previously indicated an intent to investigate the feasibility of using the variable "in-a-consortium versus not-in-a-consortium", as a stratification variable; however, preliminary analysis of the data indicated there were too few institutions in-a-consortium to use this variable for stratification or reporting. In fact, only three of the 1,206 institutions reporte being in-a-consortium.

Finally, within each enrollment class, institutions were again ordered by the ten USOE regions. The ordering procedure is described in diagram form in Figure E.1.

If all of the ordering variables (type of support, type of institution, type of grant, veteran enrollment, and USOE region) had been fully crossed, there would have been 480 (2x3x2x4x10) cells. Some of these cells would likely have been empty or quite sparce. Since no more than 200 strata could be formed while maintaining the ability to estimate within strata variance, the 480 cells would have to be grouped into 200 strata. This could be done by using a controlled selection procedure, which is typically much more costly than other procedures and which provides only approximate variance estimates. Alternately, the cells could have been grouped manually into the 200 strata using the sampler's intuition and knowledge. Another method of sampling involves ordering the institutions on the frame as previously outlined and then taking a systematic selection of about one in every three institutions. This was the procedure used by RTI. In such a design one loses the advantage of a smaller sampling error due to stratification (in fact, the sampling error would probably be larger than for simple random sampling); however, this method retains the advantage of spreading the sample over all variables at a reasonable cost.

The systematic sampling procedure used by RTI retained the control that one would obtain from a controlled selection sample in insuring the spread of the sample over all 480 cells. Also the procedure was able to take advantage of stratification in reducing the sampling error at a reasonable cost, which was only slightly more expensive than a systematic sample procedure but considerably less expensive than a controlled selection or a by-hand determined stratification procedure.

After ordering, the first six institutions were grouped into stratum 1, the next six institutions listed into stratum 2, and so forth until all 1,206 institutions had been grouped into 200 strata ((some strata necessarily contained seven institutions). In the final frame, 194 strata contained six institutions and six strata contained seven institutions. Because institutions were ordered by more variables than strata, some strata necessarily contain institutions classified in more than one of the 480 cell classifications. For example, some strata contained

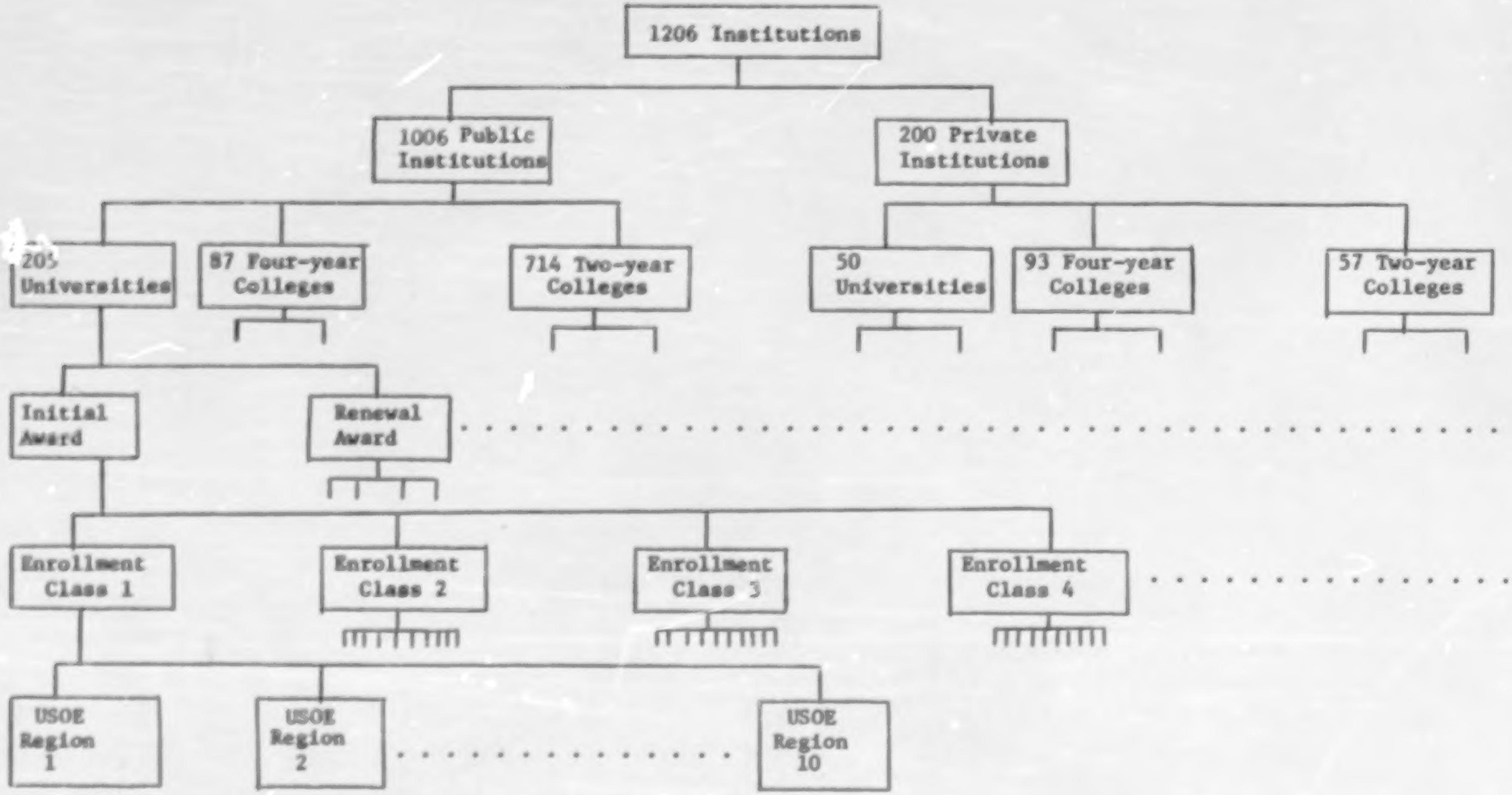
1206 Institutions
1006 Public Institutions
200 Private Institutions
205 Universities
87 Four-year Colleges
714 Two-year Colleges
50 Universities
93 Four-year Colleges
57 Two-year Colleges
Initial Award
Renewal Award
Enrollment Class 1
Enrollment Class 2
Enrollment Class 3
Enrollment Class 4
USOE Region 1
USOE Region 2
USOE Region 10

Figure E.1. Ordering Procedure for Sampling

institutions from two different regions or some public and some private institutions, or some four-year and some two-year institutions.

3. Selection Procedures

Two institutions were selected from each of the 200 strata with equal probability and without replacement. For 388 institutions, the selection probabilities were 2 out of 6 or .3333, for twelve institutions, the selection probabilities were 2 out of 7 or .2857. Both values, as would be expected, are very close to the simple random sample probabilities of 400 out of 1206 or .3317. Each sampled institution was properly weighted.

B. Sampling Procedure for the Reliability Study

A systematic selection procedure was used to select a subsample of 30 institutions for the reliability study from among the 400 sampled institutions. The 400 sample institutions were ordered in the same manner as previously described, and a sampling interval of 13.3 was calculated. Subsequently, a random selection between 1 and 13.3 determined the 30 selected institutions. This subsample from the 400 institutions permits estimates for the entire frame of 1,206 institutions.

In the case where a large number of stratification variables are desired, but a small sample size is dictated, a systematic sample is probably the most desirable. The sampling error should be approximately equal to the simple random sampling error. In this case, it would be approximately .09 for a proportion of .50. The systematic sample guarantees the sample is spread over as many stratification variables as possible, and is a very fast and cost efficient method of sampling.

If a stratified probability sampling procedure had been used, only 15 strata could have been formed containing 26 to 27 of the 400 sample institutions. Since each of the 400 sample institutions represented approximately 3 eligible institutions on the frame, each stratum would have represented about 80 eligible institutions. These 80 institutions could not have been very similar on many of the stratification variables of interest. The possible gains due to stratification would have been very small compared with a simple random sampling procedure. In addition, using either a stratified random or simple-random sampling procedure would not have guaranteed that the subsample of 30 institutions would differ on as many stratification variables as was possible using a systematic sampling procedure.

C. Procedures for Selecting Replacement Institutions

Since some of the necessary forms were unavailable for a few of the 400 sample institutions, these sample institutions were replaced by a new institution selected at random from within the same stratum. If these institutions not possessing the necessary forms differ in a significant way from those institutions with forms, a bias term will be included in the calculated estimates. Since the purpose of the study necessitated examining the forms for 400 institutions, it was decided to replace the institutions with incomplete forms and assume there were no significant differences. Selecting replacement institutions from within the same stratum should minimize any such differences if they exist. The institutions were replaced prior to selecting the subsample of 30 institutions for the reliability study.

D. Equations for Estimating Proportion and Their Sampling Errors

Let L = number of strata being considered;

n_h = number of institutions selected from stratum h;

N_h = total number of institutions in stratum h;

$$X_{hi} = \begin{cases} 1 & \text{if institution i in stratum h gives the response being estimated and is in the reporting category being considered,} \\ 0 & \text{otherwise;} \end{cases}$$

$$Y_{hi} = \begin{cases} 1 & \text{if institution (hi) is in the reporting category being considered,} \\ 0 & \text{otherwise.} \end{cases}$$

Then the estimated proportion $\hat{p}$ of institutions in a particular reporting category giving the response being estimated is:

$$\hat{p} = \frac{\sum_{h=1}^{L} \frac{N_h}{n_h} \sum_{i=1}^{n_h} X_{hi}}{\sum_{h=1}^{L} \frac{N_h}{n_h} \sum_{i=1}^{n_h} Y_{hi}}$$

If $Y_{hi}=1$ for all sample institutions, (i.e., the reporting category is the entire universe of institutions rather than some subset thereof), then:

$$\hat{p} = \frac{\sum_{h=1}^{L} \frac{N_h}{n_h} \sum_{i=1}^{n_h} X_{hi}}{N}$$

where $N = \sum_{h=1}^{L} N_h$.

Letting

$$\hat{p}_h = \sum_{i=1}^{n_h} \frac{X_{hi}}{n_h} ,$$

the formula simplifies to:

$$\hat{p} = \frac{1}{N} \sum_{h=1}^{L} N_h \sum_{i=1}^{n_h} \frac{X_{hi}}{n_h} = \frac{1}{N} \sum_{h=1}^{L} N_h \hat{p}_h ,$$

when the strata are independent.

The variance of $\hat{p}$ is then given by:

$$v(\hat{p}) = \sum_{h=1}^{L} \left(1 - \frac{n_h}{N_h}\right) \sum_{i=1}^{n_h} \frac{\hat{p}_h \quad (1-\hat{p}_h)}{n_h},$$

and the standard error of $\hat{p}$ is obtained as $se(\hat{p}) = \sqrt{v(\hat{p})}$.

E. Sampling Error Estimates

Table E.2 gives the total number of institutions in the population classified by each reporting and stratification variable, the number of institutions to be selected (expected and actual), the sampling fraction (expected and actual), and the anticipated sampling error for a percentage of 50 percent.[2] Table E.3 describes the above for each of the ten USOE regions. Since the institutions were selected with approximately equal weights, the anticipated sampling error can be approximated using the equation for a simple random sample with a finite population correction factor.

The sampling error permits a 95 percent conficence interval to be constructed about the p-value calculated from the sample results. This means that we can be reasonably sure[3] that had one obtained the data from all 1,206 institutions and performed the same analysis, the true p-value, p, would be found within the interval centered at $\hat{p}$ (estimated p-value) and plus or minus 2 sampling errors, se($\hat{p}$), or:

$$(\hat{p} - 2\,se(\hat{p}) \leq p \leq \hat{p} + 2\,se(\hat{p})).$$

---

[2] The systematic selection procedure does not guarantee a particular sampling fraction for any given sample. Rather, it provides a stochastic expectation over all possible samples, as indicated in the expected values reported in the tables. The anticipated standard error was based on these expectations.

[3] If the same sampling and estimation procedures were performed many times, ninety-five percent (95%) of the confidence intervals constructed by computing the interval as $\hat{p}$ ±2se would contain the true value.

Table E.2

SAMPLE SIZES AND ANTICIPATED SAMPLING ERROR FOR A PERCENTAGE OF 50% BY TOTAL, TYPE OF SUPPORT, TYPE OF INSTITUTION, TYPE OF GRANT, AND TWO CLASSES OF CATEGORY I AND CATEGORY II

Reporting Variables	Number of Institutions Listed on Frame (N)	Number of Institutions Selected (n)		Sampling Fraction (n/N)		Anticipated Sampling Error for p=50%[a] in %
		Expected	Actual	Expected	Actual	
All institutions	1206	400	400	.33	.33	2.04
Public	1006	334	341	.33	.34	2.23
Private	200	66	59	.33	.30	5.04
University	253	82	101	.33	.40	4.47
Four-Year College	181	61	45	.33	.25	5.28
Two-Year College	772	257	254	.33	.33	2.56
Initial Grant	242	79	79	.33	.33	4.54
Renewal Grant	964	321	321	.33	.33	2.29
Enrollment Class I	329	108	108	.33	.33	3.92
Enrollment Class II	266	92	87	.33	.33	4.41
Enrollment Class III	300	97	101	.33	.33	4.07
Enrollment Class IV	311	103	104	.33	.33	4.01

NOTE: Actual values reflect sampling after replacements.

[a] $SE. \cong \sqrt{(1-n/N)\,\frac{P(100-p)}{n}}$.

Table E.3

SAMPLE SIZES AND APPROXIMATE SAMPLING ERROR FOR A PERCENTAGE OF 50% FOR EACH OF THE TEN OE REGIONS

OE Region Code	Number of Institutions Listed on Frame (N)	Number of Institutions Selected (n)		Sampling Fraction (n/N)		Anticipated Sampling Error for p=50%[a] in %
		Expected	Actual	Expected	Actual	
1	79	24	25	.33	.32	8.03
2	90	28	29	.33	.31	7.35
3	116	39	40	.33	.35	6.64
4	290	94	95	.33	.32	4.13
5	174	60	59	.33	.35	5.47
6	120	38	34	.33	.28	6.47
7	69	24	24	.34	.35	8.47
8	51	17	16	.33	.31	9.93
9	161	53	57	.33	.36	5.62
10	58	21	21	.33	.38	9.65
TOTAL	1206	400	400	.33	.33	2.04

NOTE: Actual values reflect sampling after replacements.

[a] $SE. \cong \sqrt{(1-n/N)\ p(100-p)/N}$

Appendix F

Data Management and Processing Procedures

Appendix F

Data Management and Processing Procedures

I. GENERAL

This appendix describes the procedures followed in management and processing of the existing data compiled for the VCIP evaluation study. The major tasks involved in data management and processing were: (1) the preparation, compression, and editing of the VCIP data tape; (2) selection of stratification variables and sampling procedures; (3) quantification and coding of the POR data; (4) construction of analysis variables; (5) factor analysis; and (6) cluster analysis.

Stratification, sampling procedures, and replacement of institutions with missing data are detailed in Appendix E. Quantification of the POR data is described in Appendix D. The processing and file management steps leading to analysis and construction of the VCIP data files are outlined in the following sections.

II. OVERVIEW OF DATA BASE CONSTRUCTION

The data base construction tasks for the VCIP evaluation involved several merging and construction steps. Figure F.1 outlines the steps that led to the final VCIP data files and analysis files. The VCIP data tape was first reduced to the variables important to the VCIP evaluation. Sampling techniques reduced the population of 1,206 institutions to a sample of 400 institutions. Relevant information was then collected from USOE Forms 269 and 269-3 and merged with the compressed VCIP data tape. The data were edited for completeness and examined for inconsistencies and other obvious data error. Open-ended data on OE Form 269-2 were quantified, coded, and entered onto a separate data file along with a POR data reliability substudy file involving 30 institutions. This file was also examined for inconsistencies and out-of-range errors. The subjective data on OE Form 269-2 was merged with the objective institutional program data. The resultant data file and reliability substudy file are specified in Section VII of this appendix, in which a detailed file layout is presented labeling each data element and listing the valid codes possible for that element. Analysis variables were constructed on the basis of frequency distributions and added to the final analysis file. Appendix A details the variables as they were used in analysis.

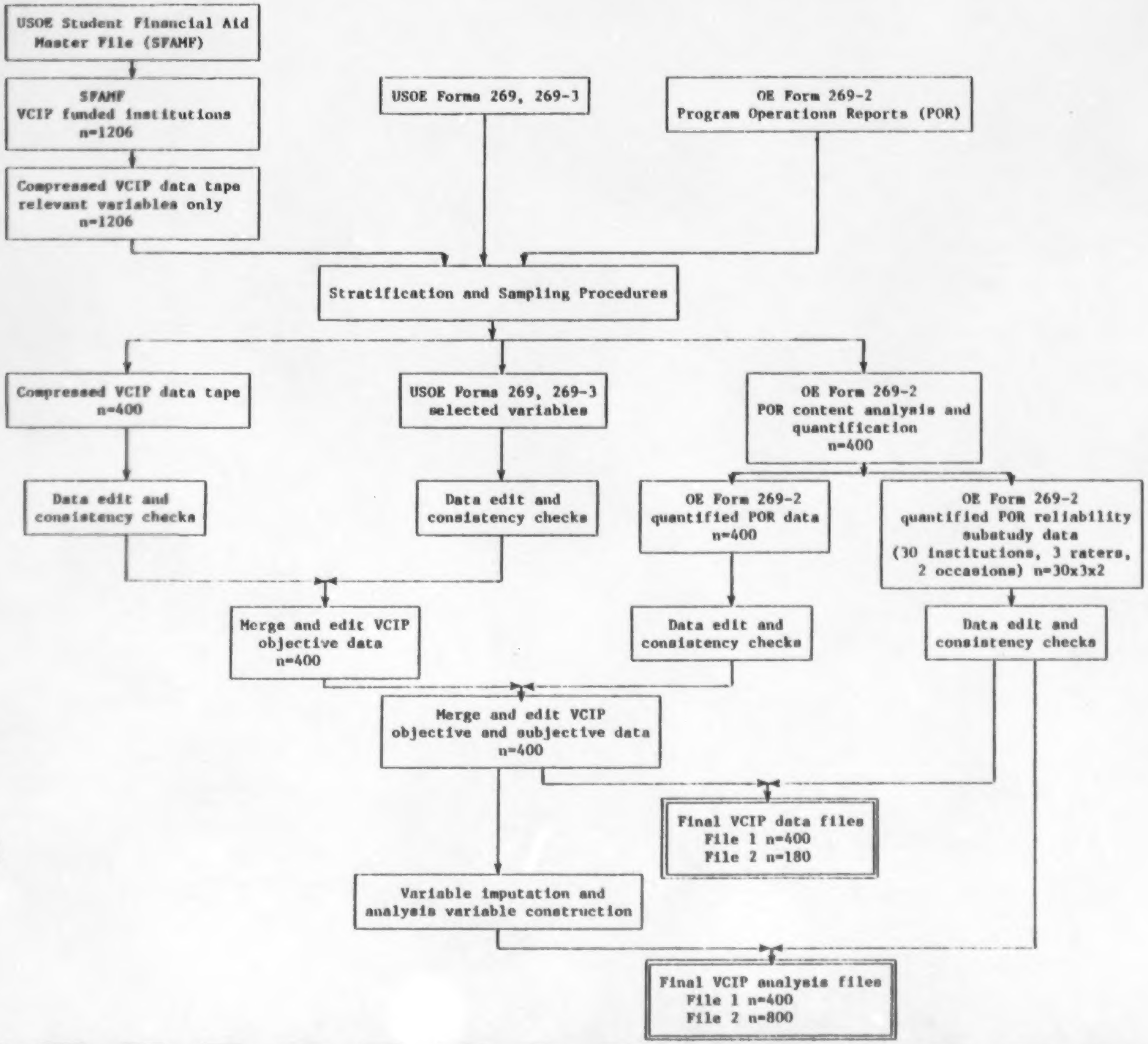
USOE Student Financial Aid Master File (SFAMF)
SFAMF VCIP funded institutions n=1206
Compressed VCIP data tape relevant variables only n=1206
USOE Forms 269, 269-3
OE Form 269-2 Program Operations Reports (POR)
Stratification and Sampling Procedures
Compressed VCIP data tape n=400
USOE Forms 269, 269-3 selected variables
OE Form 269-2 POR content analysis and quantification n=400
Data edit and consistency checks
Data edit and consistency checks
OE Form 269-2 quantified POR data n=400
OE Form 269-2 quantified POR reliability substudy data (30 institutions, 3 raters, 2 occasions) n=30x3x2
Merge and edit VCIP objective data n=400
Data edit and consistency checks
Data edit and consistency checks
Merge and edit VCIP objective and subjective data n=400
Final VCIP data files
File 1 n=400
File 2 n=180
Variable imputation and analysis variable construction
Final VCIP analysis files
File 1 n=400
File 2 n=800

Figure F.1

Steps in Constructing the VCIP Data Files

III. EDITING THE VCIP DATA TAPE

A. Preparation of the VCIP Data Tape

Several types of general data checks were computed before any of the VCIP data as it appeared on the USOE Student Financial Aid Master File was used for sampling or analysis. These checks included: (a) checks on I.D. number and institution name; (b) checks for missing data; (c) checks for funding code (VCIP-funded/not VCIP-funded), region, consortium (in a consortium/not in a consortium), type of award (initial/ renewal), type of offering (university/four-year/two-year), type of control (public/private); and (d) range checks for all variables.

A data file of 1,206 VCIP-funded institutions was constructed. The data for one institution was found to be inconsistent and all the data for that institution were entered as zeros. Sampling procedures, detailed in Appendix E, resulted in the selection of 400 Institutions,[1] and a new file was created.

Selected data collected from USOE Forms 269 and 269-3[2] and quantified data from the open-ended OE Form 269-2 were merged into one file which is provided as Section VII of this appendix. All the data was examined for completeness and out-of-range errors. Specific editing is specified below.

B. Specific Consistency Checks

Specific consistency checks beyond the normal range and missing data checks were made on the file of 400 institutions. These checks included:

(1) Consistency checks within the VCIP tape

Flag if $V31 + V32 \neq V33$
$V34 + V35 \neq V36$
$V37 + V38 \neq V39$
$V40 + V41 \neq V42$
$V43 + V44 \neq V45$
$V46 + V47 \neq V48$
$V49 + V50 \neq V51$
$V52 + V53 \neq V54$
$V31 + V34 + V37 + V40 + V43 + V46 + V49 \neq V52$
$V32 + V35 + V38 + V41 + V44 + V47 + V50 \neq V53$
$V33 + V36 + V39 + V42 + V45 + V48 + V51 \neq V54$

$V56 + V57 \neq V58$
$V55 - V58 \neq V59$

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[1] The institution with known inconsistent data was not selected in the sample of 400 Institutions.

[2] Appendix A provides the variables selected from the USOE forms.

$V61 + V62 \neq V63$
$V64 + V65 \neq V66$
$V67 + V68 \neq V69$
$V70 + V71 \neq V72$
$V73 + V74 \neq V75$
$V76 + V77 \neq V78$
$V79 + V80 \neq V81$
$V82 + V83 \neq V84$
$V85 + V86 \neq V87$
$V88 + V89 \neq V90$
$V91 + V92 \neq V93$
$V94 + V95 \neq V96$
$V97 + V98 \neq V99$
$V100 + V101 \neq V102$
$V103 + V104 \neq V105$
$V106 + V107 \neq V108$
$V61 + V67 + V73 + V79 + V85 + V91 + V97 \neq V103$
$V62 + V68 + V74 + V80 + V86 + V92 + V98 \neq V104$
$V63 + V69 + V75 + V81 + V87 + V93 + V99 \neq V105$
$V64 + V70 + V76 + V82 + V88 + V94 + V100 \neq V106$
$V65 + V71 + V77 + V83 + V89 + V95 + V101 \neq V107$
$V66 + V72 + V78 + V84 + V90 + V96 + V102 \neq V108$.

V103-V108 were not always consistent. Some institutions recorded a total while other institutions apparently recorded a total for "other" personnel services. For the analysis file only, if the total $\geq$ to the sum of the appropriate 7 variables; then total = total. If the total < the sum of the appropriate 7 variables; then total = total + the sum. This procedure was followed for V103-V108 (i.e., if $V103 \geq V61 + V67 + V73 + V79 + V85 + 91 + V97$, then $V103 = V103$. If $V103 < V61 + V67 + V73 + V79 + V85 + V91 + V97$, then $V103 = V103 + V61 + V67 + V73 + V79 + V85 + V91 + V97$.)

(2) Consistency checks within OE Form 269-2

Twenty-one response quality codes (see Appendix D) were built into the quantification and coding process of OE Form 269-2. The codes indicated that no useful information could be gained from the institutions' response to a particular area of interest in the evaluation. These response quality codes were checked against the actual coded responses for each appropriate section of data. No inconsistencies were found.

(3) Consistency checks between OE Form 269 and the VCIP tape

Flag if $V4 \neq$ item 6b OE Form 269
$V5 \neq$ item 6a OE Form 269

In the case of an inconsistency, OE Form 269 was accepced as valid unless it was missing (in which case the tape data were used).

IV. CONSTRUCTION OF ANALYSIS VARIABLES AND GROUPING OF VARIABLES

A. Construction of Analysis Variables

The first step in the construction of analysis variables involved an examination of one-way (univariate) frequency distributions of all variables and certain two-way (bivariate) frequency distributions. On the basis of these examinations and logical considerations, aggregate or composite variables were developed. Examination of the frequency distributions of the initial variables indicated that some variables had trivial variation and these variables were immediately dropped from further consideration. The analysis variables are binary variables indicating the presence or absence of any of the services or program functions indicated by the individual variables used in the construction of the analysis variable (i.e., if V118 and/or V119 is equal to 1 then AV2 equals 1).

The analysis variables constructed for analysis were as follows:

AV1	Meetings, records, and other agency contacts	V111,V112,V114-V117,V120-V122
AV2	OVA contacts in the field	V118,V119
AV3	General procedures for veterans	V124-V126
AV4	Flyers and letters	V128,V129
AV5	Combination of media and special events	V130-V132
AV6	Means of identification	V134-V144
AV7	Publications, pamphlets, and gimmicks	V147,V150,V151 V153-V155
AV8	Direct contact with schools and agencies	V156,V157,V159-V162,V164
AV9	Recruitment success	V168-V172
AV10	Positive outcomes	V173-V175,V177
AV11	Recruitment difficulties	V180-V189
AV12	Academic study skills	V198,V199 V202,V212
AV13	GED, ABE	V200,V201
AV14	Motivational services	V203-V206,V209, V211,V213
AV15	Tutorial services	V207,V210
AV16	General counseling	V224,V230-V232, V234

AV17	Number of veterans receiving services or referred	V238 $\geq$ 2, V242 $\geq$ 2
AV18	VA-related problems	V246-V258 (Even # only)
AV19	VA-related resolutions	V247-V259 (Odd # only)
AV20	OVA-related problems	V260-V276 (Even # only)
AV21	OVA-related resolutions	V261-V277 (Odd # only)
AV22	Other problems	V278,V280,V282, V284, $1 \leq$ V285 < 3
AV23	Other resolutions	V279,V281,V283
AV24	OVA office and staff	V332-V335
AV25	Qualities of OVA	V336-V340
AV26	Outside agencies	V342-V346
AV27	OVA basic services	V347-V353
AV28	Public relations or military orientation	V290,V293-V295
AV29	Outreach, recruitment responsibilities	V300,V301
AV30	Teaching or tutoring responsibilities	V303-V309
AV31	General supervision responsibilities	V310,V311 V315,V318
AV32	Counseling functions	V316,V317
AV33	Communication functions	V319-V321, V324,V325
AV34	Liaison activities	V322,V323
AV35	Coordinate services	V328,V329

B. Grouping of Variables

Toward producing more meaningful variables, variables were grouped into several variable sets or classes on the basis of *a priori* considerations.[3] The sets were determined by joint decisions of RTI, OFBE, and the Veterans Program Branch; each set is comprised of variables that are logically related in terms of some common dimension (e.g., size measures, expenditure measures, measures of a particular area of VCIP regulatory concern). The major reason for this initial grouping of variables was related to subsequent data reduction activities (see Section V). It was felt that reduction within the predefined variable sets would result in more interpretable variables composites, since all variables within a particular set would be conceptually related.

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[3] Some variables were considered of sufficient individual importance or of a sufficiently unique nature to stand alone in analysis; these variables were not grouped.

As a result of grouping decisions, nine variable sets were established. Four of these sets were comprised of the more objective variables obtained from USOE Forms 269, 269-1, and 269-3 (or from the USOE Student Financial Aid Master File, as reflected in entries on the VCIP data tape). The remaining five variable sets were comprised of quantification indices derived from the paragraph narratives of OE Form 269-2. The variable sets have been labeled as follows:

1. Institutional demographic characteristics
2. VCIP resource level
3. OVA expenditures and obligations
4. OVA personal services offered
5. Outreach and recruitment
6. Available services
7. Professional assistance available
8. Problems and resolutions
9. Coordinator's qualifications and responsibilities.

The specific variables comprising each of the variable sets specified above are indicated in Appendix A. Variables that were eliminated from consideration as a result of frequency analysis (i.e., variables with minimal variation) were not included in any variable set.

C. Special Analysis Variable Construction

Special analysis variables were constructed to summarize the data (see Table 3.1 in Chapter 3, and Tables H.11-H.13 in Appendix H), and to determine if institutions were meeting the basic VCIP services requirement. Most of these special analysis variables are binary variables indicating the presence or absence of a response to any of the items used in the construction of the analysis variable. Two variables (VCIP funded and non-VCIP funded indirect OVA services) are simply the sum of the variables used in construction of the analysis variables.

The special analysis variables are described below:

1. Summary variables

Outreach and recruitment	V110,V113,AV1,AV2,V123,AV3,AV4,AV5,AV6,AV7,V148,V149,V152,V158,V163,V165,AV8,AV9,AV10,AV11
Available services	V191,V194-V197,AV12,AV13,AV14,AV15,V208
Professional assistance	V225-V229,AV16,V233,V236,AV17
Problems and resolutions	AV18,AV19,AV20,AV21,AV22,AV23,AV32,AV33,AV34,AV35
Coordinators qualifications	V287,AV24,V291,V292,$1 \le V297 < 2$, AV25,V302,AV26,AV27,V312-V314,AV28,AV29,AV30,V326,V327,AV31
VCIP funded indirect OVA services	V34+V37+V40+V43+V46+V49
Non-VCIP funded indirect OVA services	V35+V38+V41+V44+V47+V50

2. Basic VCIP services variables

Outreach	V109-V126, V128-V132, V134-V144, V300, V313, V347, V355-V361
Recruitment	V146-V165, V167-V177, V179-V189, V301, V312, V348, V362-V365
Special education	V191, V193-V213, V303, V314, V349, V366-V371 (or $V215 \ge 2$, $V219 \ge 2$, $V220 \ge 2$, $V221 \ge 2$, $2 \le V222 < 5$)
Counseling	V224-V234, V236, V302, V316, V350, V372-V377 (or $V238 \ge 2$, $V242 \ge 2$)

V. FACTOR ANALYSIS

A. General

The next phase of the study involved the derivation of a set of dimensions (factors) that could be used in describing, comparing, and classifying VCIP programs and institutions. This was accomplished through the application of factor-analytic procedures in order to (1) reduce the redundancy in the original set of variables and (2) reduce the variables to a more manageable number. Briefly stated, factor analysis is a statistical technique whereby the underlying structure or pattern of relationships among many individual variables may be examined and assessed. That is, given the observed pattern of variation within variables and relationships among variables (variation and covariation), factor-analytic techniques allow the identification of underlying factors, or dimensions, which may explain the observed relationships. The basic aim of such techniques is data reduction, in that a relatively small set of common factors are sought which explain a substantial proportion of the variation (covariation) of a much larger set of measures.

A variety of factor-analytic models and techniques are available, each of which makes different assumptions concerning the data and requires different decisions from the investigator. These decisions include: (1) the portion of variance to be analyzed (i.e., total variance of each variable or common variance only); (2) the number of factors to extract and retain; (3) whether to rotate the factor matrix and, if so, how; and (4), if factor scores are desired, how they should be computed. The procedures and statistical techniques employed in this phase of the study are described below.

B. Procedure

In this study, an iterative principal factor analysis method was employed. As with most factor-analytic procedures, this method is concerned only with common variance. Since common variance is reliable variance, this procedure should yield factors that are more likely to be stable across different samples than would a procedure that deals with the total variance (e.g., principal components factor analysis). However, the procedure requires the investigator to use some estimate of the common variance of each variable (e.g., reliability estimate, squared multiple correlation).

Separate principal factor analyses were performed within the nine predefined categories of variables (see Section IV above). For each separate analysis, a standard package computer program was used to generate the intercorrelation matrix and the initial unrotated factor solution.[4] The "scree test" (Cattell, 1966) was used to determine the number of factors to retain from the unrotated solution. This test aims at assuring the extraction of all true factor variance at the risk of including some error factor variance. The procedure involves constructing a two-dimensional graph with an index of proportion of variance accounted for by a factor on the ordinate and factors numbered in order of extraction on the abscissa. Connecting the points plotted in this manner often yields a curve which falls rapidly at first, but then levels off to become a straight line, or "scree", with only minor fluctuations. All factors lying along the scree line are assumed to be either error factors or factors with trivial non-error variance; those lying above the scree line are assumed to be substantive, or "real", factors. Theoretically, to insure the extraction of all non-trivial common variance, the number of factors retained for subsequent rotation equals the number of factors lying above the scree plus the uppermost factor on the scree line.

Since principal axis factor analysis is designed to maximize the amount of total variability extracted by each successive factor, the resulting initial (unrotated) factor solution has certain undesirable characteristics. Specifically, the initial solution tends to be somewhat unstable and is quite often unclear and difficult to interpret. In other words, while the initial principal axis solution is useful in determining the number of factors (or number of common dimensions of the original variables), it does not necessarily provide the "best" representation of the underlying factors in terms of the dimensions that have been defined.

Various methods (rotation of axes) have been employed to help alleviate these problems. These methods involve a search for better reference points

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[4] At this initial stage, unities were employed in the diagonal of the correlation matrix. For subsequent principal axis factor analysis, estimates of common variance were obtained on the basis of the components retained and used as the diagonal elements in the correlation matrix. Common variance was reestimated and another principal axis factor solution obtained, iteratively, until the communalities converged. Since each factor analysis was conducted on a relatively small set of variables, the convergence occurred in just a few iterations.

(axes) within the defined factor space (dimensionality) by which to define the factors. Most of these procedures are designed to approach Thurstone's concept of simple structure, where each factor is composed primarily of only a few variables and each variable contributes mainly to but one factor. These subsequent factor solutions are obtained under different assumptions and constraints; one major consideration is whether or not the factors are allowed to be correlated or uncorrelated (oblique factors or orthogonal factors, respectively). In general, correlated factors (oblique rotational solutions) are felt to better represent simple structure, and to be more meaningful and interpretable. Consequently, factors were rotated obliquely in each of the nine separate analyses.

The final rotated solutions were examined, interpreted, and used to generate factor scores for each institution on each of the factors within the predetermined variable sets. These factor scores were required for the subsequent cluster analysis phase of the study (see Section VI). The major concern at this point was with how to weight the variables in computing the linear combinations comprising the factor scores. The approach employed in this study was to estimate these weights and factor scores using regression techniques. Factor scores were estimated as follows:

$$\underset{(400 \times k)}{F_s} = \underset{(400 \times p)}{Z} \; \underset{(p \times p)}{R^{-1}} \; \underset{(p \times k)}{S}$$

where F_s is the factor score matrix, Z is the standardized score matrix of the the original variables, R^{-1} is the inverse of the correlation matrix of the original variables, and S is the factor structure matrix of the oblimax solution.[5] The dimensions of each matrix are given below the respective matrix where 400 is the number of VCIP projects, p is the number of variables characterizing the VCIP projects, and k is the number of common factors. Factor scores were estimated for each of nine oblimax factor solutions.

C. Results of Factor Analyses

As noted earlier (Section IV.A), it was decided to exclude from factor analysis those variables that had insufficient endorsement frequency and/or that received an insufficient spread of ratings. The 130 variables that remained were grouped into _a priori_ variable and sets were included in nine separate principal axis factor analyses as follows[6]: (1) institutional demographic characteristics (6 items); (2) VCIP resource level (9 items); (3) OVA expenditures and obligations (16 items); (4) OVA personal services offered (32 items); (5) outreach and recruitment (20 items); (6) available services (10 items); (7) professional assistance available (9 items); (8) problems and resolutions (10 items); and (9) coordinator's qualifications and responsibilities (18 items). Each of these analyses was conducted using the factor analysis and rotation techniques described in the previous subsection.

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[5] See Harmon, H. H., Modern Factor Analysis (2ND Ed.) Chicago, Ill.: University of Chicago Press, 1967, pp. 350-354.

A total of 23 factors were derived from the nine separate factor analyses. These factors are presented separately, by _a priori_ variable set, in Tables F.1 through F.9. According to Guilford (1954), factor loadings greater than .25 to .30 are "substantial"; thus, only those variables with loadings of .30 or higher were included in these tables. The tables, which constitute the remainder of this section, have been sufficiently annoted to be interpreted without additional narrative or reference to textual material. The reader is urged, however, also to keep in mind the results of the generalizibility study (Appendix G) when interpreting these factors.

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[6] The VCIP variables which were included in the nine factor analyses are listed in Appendix A (Composite Variable List and Data Source) under their appropriate category.

Table F.1

Factors Derived from Principal Axis Analysis of Institutional Demographic Characteristics Items[a]

Factor		Rotated Loading[b]
Factor 1:	Cost	
V17	Planned per capita instructional expenditures	.95
V16	Average annual per capita instructional expenditures	.92
Factor 2:	Size	
V19	Total undergraduate enrollment	.99
V20	Undergraduate veterans enrolled	.61
V3(R9)	Region (9)	.42
V18	Type accreditation	-.39

[a] The two factors resulting from the principal axis analysis of the variables comprising this category account for 24 percent of the total variance.

[b] Rotated loadings less than .30 were omitted.

Table F.2

Factors Derived from Principal Axis Analysis of VCIP Resource Level Items[a]

Factor		Rotated Loading[b]
Factor 3:	Number of Category I Veterans	
V12	FTE Category I veterans	1.00
V21	Number of Category I veterans (April)	1.00
V23	Number of Category I veterans (Oct.)	1.00
V25	Number of Category I veterans (Feb.)	1.00
Factor 4:	Number of Category II Veterans	
V13	FTE Category II veterans	.98
V22	Number of Category II veterans (April)	1.00
V24	Number of Category II veterans (Oct.)	.98
V26	Number of Category II veterans (Feb.)	.95

[a] The two factors resulting from the principal axis analysis of the variables comprising this category accounted for 84 percent of the total variance.

[b] Rotated loadings less than .30 were omitted.

Table F.3

Factors Derived from Principal Axis Analysis of OVA Expenditures and Obligations Items[a]

Factor		Rotated Loading[b]
Factor 5:	VCIP Expenditures and Obligations	
V52	Total VCIP funds for OVA expenditures	.97
V31	Funds from VCIP for personal services	.89
V34	Funds from VCIP for employee benefits	.81
V57	Institutional share	.65
V46	Funds from VCIP for supplies	.59
V40	Funds from VCIP for travel	.46
V37	Funds from VCIP for workshop/conferences	.42
V43	Funds from VCIP for equipment purchases	.38
Factor 6:	Non-VCIP Expenditures and Obligations	
V53	Total non-VCIP funds for OVA expenditures	.99
V32	Non-VCIP funds for personal services	.88
V35	Non-VCIP funds for employee benefits	.64
V47	Non-VCIP funds for supplies	.55
V41	Non-VCIP funds for travel	.50
V38	Non-VCIP funds for workshop/conferences	.44

[a] The two factors resulting from the principal axis analysis of the variables comprising this category account for 43 percent of the total variance.

[b] Rotated loadings less than .30 were omitted.

188

Table F.4

Factors Derived from Principal Axis Analysis of OVA Personal Services Offered Items[a]

Factor		Rotated Loading[b]
Factor 7:	Counseling and Outreach Services	
V102	Total funds for clerks	.93
V99	Number of FTE clerks	.88
V97	Number of full-time clerks	.84
V78	Total funds for counselors	.74
V100	VCIP funds for clerks	.74
V108	Total funds for OVA personnel	.72
V76	VCIP funds for counselors	.70
V75	Number of FTE counselors	.66
V103	Total number of full-time personnel	.66
V106	Total VCIP funds for OVA personnel	.66
V105	Total number of FTE personnel	.62
V73	Number of full-time counselors	.61
V84	Total funds for outreach workers	.52
V79	Number of full-time outreach workers	.48
V82	VCIP funds for outreach workers	.34
V81	Number of FTE outreach workers	.32
Factor 8:	OVA Persons versus Coordinators	
V61	Number of full-time OVA persons	.89
V63	Number of FTE OVA persons	.87
V66	Total funds for OVA persons	.77
V64	VCIP funds for OVA persons	.69
V69	Number of FTE coordinators	-.73
V70	VCIP funds for coordinators	-.78
V67	Number of full-time coordinators	-.81
V72	Total funds for coordinators	-.82

(continued)

Table F.4 (continued)

Factors Derived from Principal Axis Analysis of OVA Personal Services Offered Items[a]

Factor		Rotated Loading[b]
Factor 9:	OVA Support Services	
V93	Number of FTE secretaries	.99
V96	Total funds for secretaries	.97
V91	Number of full-time secretaries	.90
V94	VCIP funds for secretaries	.82
V103	Total number of full-time personnel	.32
Factor 10:	Recruitment	
V90	Total funds for recuriters	1.00
V85	Number of full-time recruiters	.85
V87	Number of FTE recruiters	.77
V88	VCIP funds for recruiters	.77

[a] The two factors resulting from the principal axis analysis of the variables comprising this category account for 63 percent of the total variance.

[b] Rotated loadings less then .30 were omitted.

Table F.5

Factors Derived from Principal Axis Analysis of Outreach and Recruitment Items[a]

Factor		Rotated Loading[b]
Factor 11:	Media Recruitment Efforts	
V148	Local newspaper	.49
V149	Outdoor advertising	.47
V152	Radio and/or TV	.35
V123	Consult veterans services	.34
AV10	Recruitment success	.30
Factor 12:	Personal Recruitment Efforts	
V163	Letters	.74
AV9	Direct contact with schools and agencies	.46
Factor 13:	Outreach and Identification	
AV3	General procedures for veterans	.48
V123	Consult veterans services	.47
AV5	Combination of media and special events	-.32
AV12	Recruitment difficulties	-.34

[a] The two factors resulting from the principal axis analysis of the variables comprising this category account for 16 percent of the total variance.

[b] Rotated loadings less than .30 were omitted.

ED 162 151 EVALUATION OF THE VETERANS' COST-OF-INSTRUCTION PROGRAM. FINAL REPORT.

3 OF 5 FRENCH, ARTHUR M.; AND OTHERS RESEARCH TRIANGLE INST., DURHAM, N.C. CENTER FOR EDUCATIONAL RESEARCH AND EVALUATION. APR 78 388P.

Table F.6

Factors Derived from Principal Axis Analysis of Available Services Items[a]

Factor		Rotated Loading[b]
Factor 14:	Cognitive Remedial Services	
V195	Mathematical remedial courses	.88
V196	English remedial courses	.88
V197	Reading remedial courses	.78
AV13	Academic study skills	.40
V194	General remedial services	-.69
Factor 15:	Affective Remedial Services	
AV15	Mathematical services	.50
V191	Coordination of special education	.44
AV13	Academic study skills	.34
V194	General remedial services	.33

[a] The two factors resulting from the principal axis analysis of the variables comprising this category account for 36 percent of the total variance.

[b] Rotated loadings less than .30 were omitted.

Table F.7

Factors Derived from Principal Axis Analysis of Professional Assistance Available Items[a]

Factor		Rotated Loading[b]
Factor 16:	Specific Counseling	
V225	Personal counseling	.85
V227	Career counseling	.81
V228	Educational counseling	.81
V226	Family counseling	.65
V236	Coordination of counseling services	.35
AV17	General counseling	-.45
Factor 17:	General Counseling	
V233	Job placement	.61
V229	Financial counseling	.60
AV17	General counseling	.42

[a] The two factors resulting from the principal axis analysis of the variables comprising this category account for 43 percent of the total variance.

[b] Rotated loadings less than .30 were omitted.

Table F.8

Factors Derived from Principal Axis Analysis of Problems and Resolutions Items[a]

Factor		Rotated Loading[b]
Factor 18:	OVA Problems and Resolutions	
AV22	OVA related resolutions	.90
AV21	OVA related problems	.85
Factor 19:	VA Problems and Resolutions	
AV19	VA related problems	.84
AV20	VA related resolutions	.83
Factor 20:	Other Problems	
AV23	Other problems	.82
AV24	Other resolutions	.80

[a] The two factors resulting from the principal axis analysis of the variables comprising this category account for 44 percent of the total variance.

[b] Rotated loadings less than .30 were omitted.

Table F.9

Factors Derived from Principal Axis Analysis of Coordinator's Qualifications and Responsibilities Items[a]

Factor		Rotated Loading[b]
Factor 21:	Activities Orientation of Coordinator	
V312	Recruitment supervision	.91
V313	Direct outreach efforts	.84
AV29	Counseling functions	.61
V314	Establish special education programs	.59
Factor 22:	Management and Background of Coordinator	
AV30	Communication functions	.61
AV31	Liaison activities	.57
AV27	General counseling	.47
V327	Program management	.47
AV28	General supervision responsibilities	.44
AV32	Coordinate services	.40
Factor 23:	Education Level and Experience	
V287	Educational level	.75
V292	Guidence or counseling experience	.65

[a] The two factors resulting from the principal axis analysis of the variables comprising this category account for 27 percent of the total variance.

[b] Rotated loadings less than .30 were omitted.

VI. CLUSTER ANALYSIS

A. General

Once the data had been reduced through the procedures described in the previous sections, analysis activities turned to the identification of those variables that best define the similarities and differences among the VCIP programs and their host institutions. The first step in this procedure involved determination of the number of different types of programs/institutions and categorization of each program/institution into a particular type. This particular classification, or taxonomy, problem was approached through a form of cluster analysis.

Clustering, or classification, may be generally defined as the process of organizing individuals, objects, or events according to their similarities on specified attributes or variables. Thus, for our purposes, there are three essential, interrelated components of the clustering problem: (1) the definition of a set of variables or factors on which institutions can be quantitatively profiled (see subsection V.C above), (2) a quantitative index of profile similarity, and (3) a cluster analysis or grouping method.

B. Profile Similarity Index

In their classic article on this subject, Cronbach and Gleser (1953) identified three basic components of any profile: elevation, scatter, and shape. Elevation is defined as the mean of all scores comprising a profile. Scatter is equivalent to the standard deviation of a profile's elements about its mean. Shape is defined by the rank order of scores within a profile and refers to the residual information after equating profiles for both elevation and scatter.

The two most frequently used types of similarity indices are the correlational and distance measures. Generally, distance measures are considered superior to correlation measures, since the latter typically neglect information regarding profile elevation and scatter, thereby reducing the question of profile similarity to a consideration of shape alone. Probably the two most often used distance measures are the D^2 statistic, often called the Eudidean distance (see Osgood and Suci, 1952), and the Mahalanobis D^{*2} (see Rao, 1952). For variates (i.e., profile elements) that are standardized and uncorrelated, the two distance measures are identical. In such cases, D^2 can and probably should be used, since it is vastly simpler to compute[7] (an important advantage when the clustering problem involves a large number of cases, as in this study). The advantages of the Mahalanobis D^{*2} are that it provides a "true" distance between profiles despite any intercorrelations among the variates, and it has a known sampling distribution.

Since the dimensions (i.e., factor score profiles) on which the 398 VCIP institutions[8] were to be clustered are intercorrelated and since the factor themselves have different variances, the Mahalanobis distance measure was selected. Though much more difficult to compute, this distance function compensates for scale differences among the factors as well as for redundant weighting due to the pattern of covariances among the factors.

The Mahalanobis D^{*2} is found by computing the sum of the products of all possible pairs of corresponding profile differences, weighted by the appropriate element of the inverse of the covariance matrix between variates within groups. The formula is:

$$D^{*2}_{ij} = (X_i - X_j)\, C_F^{-1}\, (X_i - X_j)$$

where X_i is the vector of scores for the i^{th} object, X_j is the vector of scores for the j^{th} object, where i and j take on values of 1 through the number of objects, and C_F^{-1} is the inverse of the covariance matrix of the scores.

C. Cluster Analysis Method

There is a fairly large number of different clustering methods in existence. Many of these are non-computerized methods, however, and therefore cannot be applied to large clustering problems such as the one in this study. Other highly complex computer-based methods were not readily available because of the difficulty and expense involved in their adaptation to local computer systems. Thus, the number of viable alternative methods was substantially reduced purely by these pragmatic considerations. Unfortunately, little research effort has been devoted to systematically comparing the merits of the various clustering procedures. Based on the data that are available, the hierarchical clustering method (Ward, 1961; Ward and Hook, 1963) using a distance index of profile similarity appears to be the most effective of the viable procedures (see Blashfield, 1976). Consequently, this procedure was employed in deriving VCIP clusters.[9]

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[7] D^2 is calculated simply as the sum of the squared differences between corresponding pairs of profile elements.

[8] Two of the original 400 institutions were excluded from this phase of the study on the basis of extreme values for a number of dimensions. Examinations of USOE forms indicated highly suspect data for these two institutions.

This clustering procedure forms clusters of objects (in this case VCIP institutions) that are as similar as possible within each cluster and as different as possible between clusters. The procedure is heirarchical in that it begins by defining each of the n cases as a cluster or "group" containing one member. Considering all possible pairs of cases, the two with the most similar profiles (i.e., smallest D^{*2}) are then located and combined into a single entity (group), reducing the total number of "groups" from n to n-1. In the second stage, the two most similar of the n-1 remaining groups are located and combined. This process is repeated until all of the original n cases are combined into two groups. The goal of the procedure at any given stage is to reduce the number of groups by combining the two most similar or homogeneous groups, thereby increasing the total within-group error by the least possible amount.

D. Results of Cluster Analysis

As indicated above, the clustering technique employed in this study grouped all institutions (cases) in the sample and generated a complete hierarchical structuring, with n-1 possible solutions ranging from one institution per cluster down to two clusters, which together contain all 398 institutions. Unfortunately, in the absence of any definitive guidelines or criteria, the responsibility for deciding how many and which clusters to retain in the final solution must rest primarily on the judgement of the investigators.

The decision regarding which of the cluster solutions to select as final was worked out in close collaboration with the USOE project officer and was based upon: (1) homogeneity (as indicated by the index of within-group variation, i.e., the error term), (2) meaningfulness (whether the institutional clusters appeared to belong together based on knowledge of the VCIP programs defining them, i.e., did the cluster make sense?), and (3) size and number of clusters. The minimum cluster size determination was established as 5 or more institutions per cluster in order to obtain reasonable precision of within cluster estimation.

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[9] As noted previously, the Mahalanobis D^{*2} adopted as the index of profile similarity. The 398 x 398 distance matrix was inputted to a computerized hierarchical clustering program.

As a result of these procedures, 12 clusters were identified and interpreted, accounting for 390 of the 398 institutions.[10] The average factor score profiles calculated for each cluster are shown in Table F.10. These clusters are described and interpreted in Chapter 3 of this report. However, it should be pointed out that the cluster interpretations reflect a substantial amount of subjectivity on the part of the investigators; other investigators might have chosen to name and describe these clusters quite differently. For this reason it is suggested that the careful reader examine the profile information contained in Table F.10 as well as the crosstabular results presented in Appendix H in interpreting these results. At the same time, the reader is cautioned to keep in mind the quality of the variables as reflected in the results of the generalizability study (Appendix G).

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[10] The remaining eight institutions were either sufficiently unique to define a separate category or combined into a small (cluster size less than 4) cluster. In either case within cluster estimates based on such small numbers of institutions (3 or less) would have been unstable. Therefore, these eight institutions were not considered in subsequent analyses.

Table F.10

Mean Factor Score Profiles for 12 VCIP Clusters

	Cluster											
Factor Number	A (n=56)	B (n=23)	C (n=70)	D (n=43)	E (n=15)	F (n=38)	G (n=9)	H (n=30)	I (n=63)	J (n=21)	K (n=9)	L (n=13)
1	-.30	.09	-.21	-.11	.69	-.20	-.24	.13	-.10	2.08	-.38	-.44
2	-.19	-.36	-.25	.01	2.39	.12	1.03	.16	-.32	-1.11	.56	1.32
3	-.39	-.42	-.22	.00	.61	.12	1.28	-.27	-.36	-.65	1.65	2.88
4	-.27	-.38	-.19	-.17	.14	.11	.47	-.24	-.24	-.33	4.91	.60
5	-.44	-.41	-.21	.03	.64	.11	2.95	-.42	-.37	-.61	1.35	2.52
6	.15	-.15	-.18	-.09	.38	-.13	-.51	-.05	-.14	-.02	-.10	-.20
7	-.23	-.38	-.26	.02	.55	.03	-.24	-.30	-.38	-.52	.58	2.67
8	-.10*	.41	-.06*	.06	-.05*	-.78*	.32	.44	.27	-.46*	.42	-.53*
9	-.32	-.31	-.01	-.11	.49	.43	.63	-.16	-.28	-.57	.86	.44
10	.18	-.20	-.12	-.07	.61	-.15	-.10	-.11	-.22	-.19	.34	-.03
11	.12	-.01	-.29	.27	.33	.16	.71	.28	-.33	-.44	.09	.20
12	.30	-.50	-.25	.12	.13	.50	.08	-.05	-.16	-.21	.27	.06
13	-.02	-.22	-.21	.02	.19	.54	-.75	-.14	.13	.30	-.41	-.17
14	.63	-.25	-.12	-.14	-.63	-.17	1.07	-.12	-.39	.09	.07	.84
15	-.03	-.11	.29	-.30	.40	.13	.64	.08	-.43	-.28	.36	.33
16	.31	.18	.27	-.20	.60	.47	.53	.35	-1.24	-.08	.29	.31
17	-.02	1.13	-.24	-.34	.06	.83	.74	-.36	-.31	-.23	.23	.00
18	.39	-.09	-.08	-.21	-.18	.01	-.06	-.13	-.34	-.23	.42	.12
19	-.30	-.49	.32	.27	-.06	.18	.33	-.30	-.14	-.12	-.06	.35
20	-.14	.15	-.40	1.50	-.06	.08	-.33	-.09	-.25	-.29	.11	-.43
21	-.30	-.04	-.11	.27	-.59	.61	.47	1.07	-.55	-.39	.68	.12
22	-.32	.35	.05	.24	.02	.38	.34	-.27	-.40	-.29	.55	.50
23	-.45	-.15	-.15	-.07	-.04	.54	.55	.58	-.26	.10	.39	.43

* Negative pole of a bipolar factor.

VII. FINAL DATA FILES

The data base format, which constitutes the remainder of this appendix, describes the variables, definitions, locations, and codes for the VCIP data file and reliability substudy file. The data base represents the final product of data file construction, and includes all the variables collected or abstracted from USOE Forms 269, 269-1, 269-2, and 269-3, and the USOE Student Financial Aid Master File.

Missing data is indicated by the following codes:

-1 missing data or nonresponse
-2 not applicable
-3 bad data (multiple response, out-of-range, don't know).

The analysis variables (variable composites) are not provided as part of the final data file. Section IV describes the analysis variable construction used by RTI during the VCIP evaluation.

VETERANS' COST-OF-INSTRUCTION PROGRAM DATA FILES

April 1978

Standard Codes and Tape Layout

FILE 1

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Variable Number	Tape Position	Variable Description	Valid Codes
1	1-10	RTI Identification Number	(implicit F10.0)
		VETERANS' COST-OF-INSTRUCTION DATA TAPE (Variables 2-13)	
2	11-45	Name of Institution	
3	46	Federal Region	0-9 (10 is equated to 0)
4	47	Highest Level of Educational Offering	1 - University 2 - 4-year college 3 - 2-year college
5	48	Type of Institution	1 - Public 2 - Private
6	49-78	Street Address	
7	79-101	City	
8	102-103	State	
9	104-108	Zip Code	
10	109	Type of Award	0 - Not a consortium 1 - Consortium
11	110	Application Status	1 - Initial 2 - Renewal
12	111-116	Category I	Units = Full-Time Equivalency Factor (implicit F6.2)

Variable Number	Tape Position	Variable Description	Valid Codes
13	117-122	Category II	Units = Full-Time Equivalency Factor (implicit F6.2)
14	123-129	Sub-Sample Weight	(implicit F7.4)
15	130-132	Total Weight	(implicit F3.1)

APPLICATION FOR THE ACADEMIC YEAR 1975-1976 (OE FORM 269)

16	133-138	Average Annual Per Capita Instructional Expenditures for Academic Years 1972-1975 (Item 18)	(implicit F6.0)
17	139-144	Planned Per Capita Instructional Expenditures for Academic Year 1975-76 (Item 19)	(implicit F6.0)
18	145	Type of Accreditation (Item 20)	0 - No response 1 - Fully Accredited 2 - Correspondence Status 3 - Three Letter Approval 4 - Candidate

VETERAN STUDENT ENROLLMENT VERIFICATION (OE FORM 269-3)

19	146-151	Total Undergraduate Student Enrollment	(implicit F6.0)
20	152-157	Eligible Undergraduate Veterans Enrolled	(implicit F6.0)

ELIGIBLE VETERANS ENROLLED April 16

21	158-163	FTE Category I Veterans	(implicit F6.2)
22	164-169	FTE Category II Veterans*	(implicit F6.2)

ELIGIBLE VETERANS ENROLLED October 16 (Item 10)

23	170-175	FTE Category I Veterans	(implicit F6.2)

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*26 responses obtained from OE Form 269 (item 17).

Variable Number	Tape Position	Variable Description	Valid Codes
24	176-181	FTE Category II Veterans	(implicit F6.2)

ELIGIBLE VETERANS ENROLLED February 16 (Item 12)

Variable Number	Tape Position	Variable Description	Valid Codes
25	182-187	FTE Category I Veterans	(implicit F6.2)
26	188-193	FTE Category II Veterans	(implicit F6.2)

VETERANS' COST-OF-INSTRUCTION PROGRAM DATA TAPE

Variable Number	Tape Position	Variable Description	Valid Codes
27	194-202	New Award (Updated net VCIP Award)	(implicit F9.2)

FISCAL OPERATIONS REPORT (OE FORM 269-1 on VCIP data tape)

SECTION A

Federal Allotment and Budget Categories

Variable Number	Tape Position	Variable Description	Valid Codes
28	203-212	Non-VCIP Funds (Item 7)	(implicit F10.2)
29	213-222	Instructional Expenses (Item 8)	(implicit F10.2)
30	223-232	Office of Veterans' Affairs Expenses (Item 9)	(implicit F10.2)

SECTION B

Expenditures and Obligations for the Office of Veterans' Affairs

PERSONAL SERVICES (Salaries) (Item 10)

Variable Number	Tape Position	Variable Description	Valid Codes
31	233-241	VCIP Funds (Column 1)	(implicit F9.2)
32	242-250	Institutional Funds (Column 2)	(implicit F9.2)
33	251-259	Total Expenditures for the OVA (Column 3)	(implicit F9.2)

EMPLOYEE BENEFITS (Item 11)

Variable Number	Tape Position	Variable Description	Valid Codes
34	260-268	VCIP Funds (Column 1)	(implicit F9.2)
35	269-277	Institutional Funds (Column 2)	(implicit F9.2)
36	278-286	Total Expenditures for the OVA (Column 3)	(implicit F9.2)

Variable Number	Tape Position	Variable Description	Valid Codes
		WORKSHOP/CONFERENCE (Item 12)	
37	287-295	VCIP Funds (Column 1)	(implicit F9.2)
38	296-304	Institutional Funds (Column 2)	(implicit F9.2)
39	305-313	Total Expenditures for the OVA (Column 3)	(implicit F9.2)
		TRAVEL (Item 13)	
40	314-322	VCIP Funds (Column 1)	(implicit F9.2)
41	323-331	Institutional Funds (Column 2)	(implicit F9.2)
42	332-340	Total Expenditures for the OVA (Column 3)	(implicit F9.2)
		EQUIPMENT PURCHASES (Item 14)	
43	341-349	VCIP Funds (Column 1)	(implicit F9.2)
44	350-358	Institutional Funds (Column 2)	(implicit F9.2)
45	359-367	Total Expenditures for the OVA (Column 3)	(implicit F9.2)
		SUPPLIES (Item 15)	
46	368-376	VCIP Funds (Column 1)	(implicit F9.2)
47	377-385	Institutional Funds (Column 2)	(implicit F9.2)
48	386-394	Total Expenditures for the OVA (Column 3)	(implicit F9.2)
		OTHER (Item 16)	
49	395-403	VCIP Funds (Column 1)	(implicit F9.2)
50	404-412	Institutional Funds (Column 2)	(implicit F9.2)
51	413-421	Total Expenditures for the OVA (Column 3)	(implicit F9.2)
		TOTAL	
52	422-430	VCIP Funds (Column 1)	(implicit F9.2)
53	431-439	Institutional Funds (Column 2)	(implicit F9.2)

Variable Number	Tape Position	Variable Description	Valid Codes
54	440-448	Total Expenditures for the OVA (Column 3)	(implicit F9.2)
		SECTION C	
		Summary	
55	449-457	Net VCIP Award (Item 17)	(implicit F9.2)
56	458-466	Total Expenditures and Obligations for the OVA (Item 18)	(implicit F9.2)
57	467-475	Institutional Share of Award (Item 19)	(implicit F9.2)
58	476-484	Total Expenditures from Award (Item 20)	(implicit F9.2)
59	485-493	Balance (Item 21)	(implicit F9.2)
60	494-502	Amount Drawn from NIH (Item 22)	(implicit F9.2)
		SECTION E	
		Breakdown of Personal Services	
		FULL-TIME OVA PERSON (Item 1)	
61	503-505	Number Full-Time (Column 1)	(implicit F3.0)
62	506-510	Part-Time FTE (Column 2)	(implicit F5.2)
63	511-516	Total FTE Employed (Column 3)	(implicit F6.2)
64	517-525	VCIP Funds (Column 4)	(implicit F9.2)
65	526-534	Institutional Funds (Column 5)	(implicit F9.2)
66	535-543	Total Funds (Column 6)	(implicit F9.2)
		COORDINATOR (Item 2)	
67	544-546	Number Full-Time (Column 1)	(implicit F3.0)
68	547-551	Part-Time FTE (Column 2)	(implicit F5.2)
69	552-557	Total FTE Employed (Column 3)	(implicit F6.2)
70	558-566	VCIP Funds (Column 4)	(implicit F9.2)

Variable Number	Tape Position	Variable Description	Valid Codes
71	567-575	Institutional Funds (Column 5)	(implicit F9.2)
72	576-584	Total Funds (Column 6)	(implicit F9.2)
		COUNSELORS (Item 3)	
73	585-587	Number Full-Time (Column 1)	(implicit F3.0)
74	588-592	Part-Time FTE (Column 2)	(implicit F5.2)
75	593-598	Total FTE Employed (Column 3)	(implicit F6.2)
76	599-607	VCIP Funds (Column 4)	(implicit F9.2)
77	608-616	Institutional Funds (Column 5)	(implicit F9.2)
78	617-625	Total Funds (Column 6)	(implicit F9.2)
		OUTREACH WORKERS (Item 4)	
79	626-628	Number Full-Time (Column 1)	(implicit F3.0)
80	629-633	Part-Time FTE (Column 2)	(implicit F5.2)
81	634-639	Total FTE Employed (Column 3)	(implicit F6.2)
82	640-648	VCIP Funds (Column 4)	(implicit F9.2)
83	649-657	Institutional Funds (Column 5)	(implicit F9.2)
84	653-666	Total Funds (Column 6)	(implicit F9.2)
		RECRUITERS (Item 5)	
85	667-669	Number Full-Time (Column 1)	(implicit F3.0)
86	670-674	Part-Time FTE (Column 2)	(implicit F5.2)
87	675-680	Total FTE Employed (Column 3)	(implicit F6.2)
88	681-689	VCIP Funds (Column 4)	(implicit F9.2)
89	690-698	Institutional Funds (Column 5)	(implicit F9.2)
90	699-707	Total Funds (Column 6)	(implicit F9.2)
		SECRETARIES (Item 6)	
91	708-710	Number Full-Time (Column 1)	(implicit F3.0)
92	711-715	Part-Time FTE (Column 2)	(implicit F5.2)

Variable Number	Tape Position	Variable Description	Valid Codes
93	716-721	Total FTE Employed (Column 3)	(implicit F6.2)
94	722-730	VCIP Funds (Column 4)	(implicit F9.2)
95	731-739	Institutional Funds (Column 5)	(implicit F9.2)
96	740-748	Total Funds (Column 6)	(implicit F9.2)
		CLERKS (Item 7)	
97	749-751	Number Full-Time (Column 1)	(implicit F3.0)
98	752-756	Part-Time FTE (Column 2)	(implicit F5.2)
99	757-762	Total FTE Employed (Column 3)	(implicit F6.2)
100	763-771	VCIP Funds (Column 4)	(implicit F9.2)
101	772-780	Institutional Funds (Column 5)	(implicit F9.2)
102	781-789	Total Funds (Column 6)	(implicit F9.2)
		TOTAL (Item 8)	
103	790-792	Number Full-Time (Column 1)	(implicit F3.0)
104	793-797	Part-Time FTE (Column 2)	(implicit F5.2)
105	798-803	Total FTE Employed (Column 3)	(implicit F6.2)
106	804-812	VCIP Funds (Column 4)	(implicit F9.2)
107	813-821	Institutional Funds (Column 5)	(implicit F9.2)
108	822-830	Total Funds (Column 6)	(implicit F9.2)

PROGRAM OPERATIONS REPORT (OE FORM 269-2)

Outreach: Item 12 A

I. Procedures to Access Needs, Problems, Interests

109	831	A. General - no description	0 - No response to item 1 - Item or activity reported
		B. Specific to Individuals	
110	832	Formal needs survey	
111	833	Telephone contacts	

Variable Number	Tape Position	Variable Description	Valid Codes
112	834	Tearsheets	0 - No response to item 1 - Item or activity reported
113	835	Contact with walk-ins	
114	836	Specific followup	
115	837	Peer representatives	
116	838	Group meetings	
117	839	Consult admissions records	
118	840	OVA contact...Reformatory	
119	841	OVA contact...In the field	
120	842	Contact by other campus agency	
121	843	Contact by off-campus agency	
122	844	Other specific to individual	
		C. General to Veterans	
123	845	Consult veterans services	
124	846	Consult referral agencies	
125	847	Consult general surveys	
126	848	Other general to veterans	
127	849	D. Response Quality	0 - Response to item in Section I 1 - No response to Section I 2 - Section I not applicable
		II. Activities to Inform, Disseminate	
128	850	Flyers	0 - No response to item 1 - Item or activity reported
129	851	Letters	
130	852	Combination of media	
131	853	Special events	
132	854	Other activities to inform	

Variable Number	Tape Position	Variable Description	Valid Codes
133	855	Response quality	0 - Response to item in Section II 1 - No response to Section II 2 - Section II not applicable
		III. Means of Identifying Veteran Population	
		A. Use of Namelists	
134	856	Veterans organizations (other than VA)	0 - No response to item 1 - Item or activity reported
135	857	Government agencies	
136	858	Veterans Administration	
137	859	Educational institutions	
138	860	Military bases	
139	861	Other namelists	
		B. Direct Contact with Veterans	
140	862	Schools and colleges	
141	863	Places of employment	
142	864	Community agencies	
143	865	Military bases	
144	866	C. Identification of Veteran Population by other means	
145	867	D. Response Quality	0 - Response to item in Section III 1 - No response to Section III 2 - Section III not applicable
		Recruitment: Item 12 B	
		IV. OVA Techniques	
146	868	A. General Use of Techniques - no details	0 - No response to item 1 - Item or activity reported

Variable Number	Tape Position	Variable Description	Valid Codes
		B. Indirect Techniques Used by OVA	
147	869	Publications	0 - No response to item 1 - Item or activity reported
148	870	Local newspaper releases	
149	871	Outdoor advertising	
150	872	Institution's recruitment materials	
151	873	Distribution of pamphlets	
152	874	Radio and/or TV spots	
153	875	Return postal card	
154	876	Contact with other agencies	
155	877	Pens, stickers, and gimmicks	
		C. Direct Contact Techniques Used by OVA	
156	878	Direct contact	
157	879	Contacts in minority communities	
158	880	Personal appearance at strategic locations	
159	881	Presentations at schools	
160	882	Visit military bases	
161	883	Visit agencies	
162	884	Telephone contact	
163	885	Letters	
164	886	Attend off-campus registrations	
165	887	Personal contacts	
166	888	D. Response Quality	0 - Response to item in Section IV 1 - No response to Section IV 2 - Section IV not applicable

Variable Number	Tape Position	Variable Description	Valid Codes
		V. Comment on Recruitment Successes	
167	889	A. States Satisfaction - no specifics	0 - No response to item 1 - Item or activity reported
		B. Fruitful Endeavors	
168	890	Personal appearances	
169	891	Joint efforts	
170	892	Work at military bases	
171	893	Use of vet survey	
172	894	Advertising	
		C. Outcomes	
173	895	Large number vets contacted	
174	896	Increase in veteran enrollment	
175	897	Maintained level of enrollment	
176	898	Good feedback on OVA	
177	899	Increase in admissions inquiries	
178	900	D. Response Quality	0 - Response to item in Section V 1 - No response to Section V 2 - Section V not applicable
		VI. Comment on Recruitment Difficulties	
179	901	A. States Failure - no details	0 - No response to item 1 - Item or activity reported
		B. Related to Recruitment Effort	
180	902	Vets had to leave	
181	903	Decrease in enrollment	
182	904	Not broad enough program	
183	905	Minimal contact	
184	906	Recruitment setback	

Variable Number	Tape Position	Variable Description	Valid Codes
185	907	Minimal success	0 - No response to item 1 - Item or activity reported
186	908	Other "related to recruitment effort"	
		C. Unsuccessful Practices	
187	909	Mailings	
188	910	Advertising	
189	911	Other unsuccessful practices	
190	912	D. Response Quality	0 - Response to item in Section VI 1 - No response to Section VI 2 - Section VI not applicable

Special Education: Item 12 C

VII. Coordination of Special Education

Variable Number	Tape Position	Variable Description	Valid Codes
191	913	Nature of activity	0 - No response to item 1 - OVA coordinates and refers only 2 - OVA provides all services 3 - OVA provides services and refers
192	914	Response Quality	0 - Response to item in Section VII 1 - No response to Section VII 2 - Section VII not applicable

VIII. Available Services

Variable Number	Tape Position	Variable Description	Valid Codes
193	915	A. General Services Available	0 - No response to item 1 - Item or activity reported
		B. Remedial, Compensatory, Developmental	
194	916	General remedial services	
195	917	Mathematics	
196	918	English	

Variable Number	Tape Position	Variable Description	Valid Codes
197	919	Reading	0 - No response to item 1 - Item or activity reported
198	920	Study skills	
199	921	Other academics	
200	922	GED	
201	923	ABE	
202	924	Other remedial, compensatory, developmental service	
		C. Motivational	
203	925	General--motivational services	
204	926	Career workshop	
205	927	Personal development	
206	928	College life	
		D. Tutorial	
207	929	General tutoring services	
208	930	Study center	
		E. Selected Related Practices	
209	931	Testing	
210	932	Network of tutors	
211	933	Refer vets to SS, UB	
212	934	Special courses developed	
213	935	Periodic conferences	
214	936	F. Response Quality	0 - Response to item in Section VIII 1 - No response to Section VIII 2 - Section VIII not applicable

214

Variable Number	Tape Position	Variable Description	Valid Codes
IX.		Number of Veterans Receiving Special Education Services	
215	937	Total	0 - No response to item 1 - None 2 - 1-99 3 - 100-499 4 - 500 +
216	938	OVA can't determine figure	0 - No response to item 1 - Item or activity reported
217	939	Coder can't determine figure	0 - No response to item 1 - Item or activity reported
218	940	Response Quality	0 - Response to item in Section IX 1 - No response to Section IX 2 - Section IX not applicable 3 - Duplicated count
	X.	Number of Veterans Served Under VA Sections	
219	941	A. Section 1691	0 - No response 1 - None 2 - 1-99 3 - 100-299 4 - 300 +
220	942	B. Section 1692	0 - No response 1 - None 2 - 1-99 3 - 100-299 4 - 300 +
221	943	C. Section 1696	0 - No response 1 - None 2 - 1-99 3 - 100-299 4 - 300 +
222	944	D. Total Number of Veterans Served	0 - No response 1 - None 2 - 1-99 3 - 100-499 4 - 500 + 5 - OVA can't determine total 6 - Coder can't determin total

Variable Number	Tape Position	Variable Description	Valid Codes
223	945	E. Response Quality	0 - Response to item in Section X 1 - No response to Section X 2 - Section X not applicable

Counseling: Item 12 D

XI. Professional Assistance Available to Veterans

Variable Number	Tape Position	Variable Description	Valid Codes
224	946	A. Counseling Services Available--no specifics	0 - No response to item 1 - Item or activity reported
		B. Services Available	
225	947	Personal	
226	948	Family	
227	949	Career	
228	950	Educational	
229	951	Financial	
230	952	Legal	
231	953	Health	
232	954	Veterans	
233	955	Job placement	
234	956	Other services	
235	957	C. Response Quality	0 - Response to item in Section XI 1 - No response to Section XI 2 - Section XI not applicable

Variable Number	Tape Position	Variable Description	Valid Codes
		XII. Coordination	
236	958	Activity	0 - No response 1 - OVA does all counseling 2 - OVA refers only 3 - OVA provides services and refers
237	959	Response Quality	0 - Response to item in Section XII 1 - No response to Section XII 2 - Section XII not applicable
		XIII. Number of Veterans Receiving Counseling Services	
238	960	Total	0 - No response 1 - None served 2 - 1-99 3 - 100-499 4 - 500-999 5 - 1000 +
239	961	OVA can't determine figure	0 - No response to item 1 - Item or activity reported
240	962	Coder can't determine figure	0 - No response to item 1 - Item or activity reported
241	963	Response Quality	0 - Response to item in Section XIII 1 - No response to Section XIII 2 - Section XIII not applicable
		XIV. Number of Veterans Referred for Counseling Services	
242	964	Total	0 - No response 1 - None referred 2 - 1-99 3 - 100-499 4 - 500-999 5 - 1000 +
243	965	OVA can't determine figure	0 - No response to item 1 - Item or activity reported

Variable Number	Tape Position	Variable Description	Valid Codes
244	966	Coder can't determine figure	0 - No response to item 1 - Item or activity reported
245	967	Response Quality	0 - Response to item in Section XIV 1 - No response to Section XIV 2 - Section XIV not applicable
		XV. Problems and Resolutions: POR Item 13	
		A. VA-Related Problems and Resolutions	
246	968	Problem A: Late VA checks	0 - No response to item 1 - Item or activity reported
247	969	Resolution(s) for Problem A	
248	970	Problem B: No lists of recently released vets	
249	971	Resolution(s) for Problem B	
250	972	Problem C: Lack of OVA staff	
251	973	Resolution(s) for Problem C	
252	974	Problem D: Complex administrative requirements posed by VA	
253	975	Resolution(s) for Problem D	
254	976	Problem E: No approval for work-study placements	
255	977	Resolution(s) for Problem E	
256	978	Problem F: Limited funding or funding cuts	
257	979	Resolution(s) for Problem F	
258	980	Problem G: Delimitation date resulting in fewer vets	
259	981	Resolution(s) for Problem G	

Variable Number	Tape Position	Variable Description	Valid Codes
		B. OVA-Related Problems and Resolutions	
260	982	Problem H: Limited Staff	0 - No response to item 1 - Item or activity reported
261	983	Resolution(s) for Problem H	
262	984	Problem I: Overpayments to veterans	
263	985	Resolution(s) for Problem I	
264	986	Problem J: OVA staff turnover	
265	987	Resolution(s) for Problem J	
266	988	Problem K: Difficult access to records	
267	989	Resolution(s) for Problem K	
268	990	Problem L: Not enough emphasis on related services	
269	991	Resolution(s) for Problem L	
270	992	Problem M: Staff or outside agencies limited	
271	993	Resolution(s) for Problem M	
272	994	Problem N: OVA activities not adequate	
273	995	Resolution(s) for Problem N	
274	996	Problem O: Recognition of OVA	
275	997	Resolution(s) for Problem O	
276	998	Problem P: Poor location; inadequate space	
277	999	Resolution(s) for Problem P	
		C. Student-Related Problems and Resolutions	
278	1000	Problem Q: Hardships caused to veterans	
279	1001	Resolution(s) for Problem Q	

Variable Number	Tape Position	Variable Description	Valid Codes
280	1002	Problem R: Motivating students	0 - No response to item 1 - Item or activity reported
281	1003	Resolution(s) for Problem R	
282	1004	Problem S: Students don't seek counseling on their own	
283	1005	Resolution(s) for Problem S	
		D. Other Problems	
284	1006	Any other problems	
285	1007	General	0 - No response 1 - Mentioned ONLY problems(s) and solutions(s) for period OTHER than 1975-76 2 - Mentioned ONLY minor problems and so designated them 3 - Stated that there were NO major problems (or no problems)
286	1008	Response Quality	0 - Response to item in Section XV 1 - No Response to Section XV 2 - Section XV not applicable
	XVI.	Coordinator's Highest Educational Level	
287	1009	A. Educational Level	0 - No response 1 - Less than BA 2 - Bachelor's 3 - Master's 4 - Doctoral 5 - Other
288	1010	B. Response Quality	0 - Response to item in Section XVI 1 - No response to Section XVI 2 - Section XVI not applicable

Variable Number	Tape Position	Variable Description	Valid Codes
		XVII. Coordinator's Qualifications	
289	1011	A. General Qualifications - no specifics	0 - No response to item 1 - Item or activity reported
		B. Specific Qualifications	
290	1012	Public relations	
291	1013	Management administrative	
292	1014	Guidance, counseling	
293	1015	Helping professions, community work	
294	1016	Worked for VA or with veterans	
295	1017	Worked in the military	
296	1018	C. Response Quality	0 - Response to item in Section XVII 1 - No response to Section XVII 2 - Section XVII not applicable
		XVIII. Veteran Status of Coordinator	
297	1019	A. Veteran Status (Vietnam era or any era)	0 - No response 1 - A veteran 2 - Not a veteran 3 - Response given, but not clear
298	1020	B. Response Quality	0 - Response to item in Section XVIII 1 - No response to Section XVIII 2 - Section XVIII not applicable
		XIX. (List) Major Responsibilities of Coordinator	
299	1021	A. General Duties - no specifics	0 - No response to item 1 - Item or activity reported
		B. Direct Participation	
300	1022	Outreach	

Variable Number	Tape Position	Variable Description	Valid Codes
301	1023	Recruitment	0 - No response to item 1 - Item or activity reported
302	1024	Counseling	
303	1025	Special Education, Tutoring	
304	1026	Benefits, veterans problems	
305	1027	Registration, student records	
306	1028	Job placement, interviews, training	
307	1029	Referral	
308	1030	Teaching	
309	1031	Other direct participation	
		C. Supervision and Monitoring	
310	1032	Supervise staff	
311	1033	Supervise/coordinate staff training	
312	1034	Supervise recruitment	
313	1035	Direct outreach efforts	
314	1036	Establish special ed, tutorials	
315	1037	Work-study students	
316	1038	Counseling functions	
317	1039	Referral	
318	1040	Other supervisory functions	
		D. Communication	
319	1041	Use advisory committee	
320	1042	Keep informed	
321	1043	PR and information services	
322	1044	Liaison with community	
323	1045	Liaison among institution, VA, HEW, and other OVAs	

Variable Number	Tape Position	Variable Description	Valid Codes
324	1046	Liaison with institutional staff	0 - No response to item 1 - Item or activity reported
325	1047	Other communication responsibilities	
		E. Program Management	
326	1048	Plan, implement total program	
327	1049	Conduct business	
328	1050	Coordinate services	
329	1051	Other	
330	1052	F. Response Quality	0 - Response to item in Section XIX 1 - No response to Section XIX 2 - Section XIX not applicable
		XX. Why Veterans are Effectively Served	
331	1053	A. General, Positive Response-no Specifics	0 - No response to item 1 - Item or activity reported
		B. OVA Office and Staff	
332	1054	OVA office central to campus	
333	1055	OVA qualified staff	
334	1056	OVA staff mostly veterans	
335	1057	Other office and staff	
		C. Qualities of OVA	
336	1058	Responsive	
337	1059	Solve problems	
338	1060	Advocacy role for veterans	
339	1061	OVA serves liaison role	
340	1062	OVA personalized service	
341	1063	Other OVA qualities	

Variable Number	Tape Position	Variable Description	Valid Codes
		D. Outside Agencies	
342	1064	Cooperation with VA and/or HEW	0 - No response to item 1 - Item or activity reported
343	1065	Cooperation from Institution	
344	1066	Cooperation with other agencies	
345	1067	Useful advisory committee	
346	1068	Personalized education by Institution	
		E. Ova Basic Services	
347	1069	Outreach activity	
348	1070	Recruitment activity	
349	1071	Special education activity	
350	1072	Counseling activity	
351	1073	Referral system within Institution	
352	1074	Referral system outside Institution	
353	1075	Other OVA basic services	
354	1076	F. Response Quality	0 - Response to item in Section XX 1 - No response to Section XX 2 - Section XX not applicable
		XXI. Selected Other Material in POR	
		A. Outreach	
355	1077	Budget constraints	0 - No response to item 1 - Item or activity reported
356	1078	Other vets' needs	
357	1079	Work with Upward Bound project	
358	1080	Satisfactory % of vets contacted have enrolled	
359	1081	Contact those who normally come in contact with vets	

Variable Number	Tape Position	Variable Description	Valid Codes
360	1082	Train a special group of outreach workers	0 - No response to item 1 - Item or activity reported
361	1083	Other outreach	
		B. Recruitment	
362	1084	Outreach and recruitment overlap	
363	1085	Vet recruitment integrated	
364	1086	Meet with OVA colleagues	
365	1087	Other recruitment	
		C. Special Education	
366	1088	Remedial work is referred off-campus	
367	1089	Students can cross-register	
368	1090	Satisfactory % of vets in Special Education	
369	1091	Vets share same remedial training/resources	
370	1092	Tutorial benefits have not been promoted	
371	1093	Other Special Education	
		D. Counseling	
372	1094	Students required to review program	
373	1095	Placement test automatically given	
374	1096	Career/personal counseling to non-student veterans	
375	1097	Veteran's counselor	
376	1098	Counseling on a scheduled basis	
377	1099	Other counseling	

Variable Number	Tape Position	Variable Description	Valid Codes
378	1100	E. Institutional Commitment, Activities, Policy Changes, Etc. - General	0 - No response to item 1 - Item or activity reported
379	1101	F. Response Quality - no response to Section XXI	0 - Response to item in Section XXI 1 - No response to Section XXI 2 - Section XXI not applicable

Standard Codes and Tape Layout

FILE 2

RELIABILITY SUBSTUDY DATA FILE (30 Institutions)

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Variable Number	Tape Position	Variable Description	Valid Codes
1	1-4	RTI Identification Number	(implicit F4.0)

PROGRAM OPERATIONS REPORT (OE FORM 269-2)

Outreach: Item 12 A

I. Procedures to Access Needs, Problems, Interests

Variable Number	Tape Position	Variable Description	Valid Codes
2	5	A. General - no description	0 - No response to item 1 - Item or activity reported
		B. Specific to Individuals	
3	6	Formal needs survey	
4	7	Telephone contacts	
5	8	Tearsheets	
6	9	Contact with walk-ins	
7	10	Specific followup	
8	11	Peer representatives	
9	12	Group meetings	
10	13	Consult admissions records	
11	14	OVA contact...Reformatory	
12	15	OVA contact...In the field	
13	16	Contact by other campus agency	
14	17	Contact by off-campus agency	
15	18	Other specific to individual	

Variable Number	Tape Position	Variable Description	Valid Codes
		C. General to Veterans	
16	19	Consult veterans services	0 - No response to item 1 - Item or activity reported
17	20	Consult referral agencies	
18	21	Consult general surveys	
19	22	Other general to veterans	
20	23	D. Response Quality	0 - Response to item in Section I 1 - No response to Section I 2 - Section I not applicable
		II. Activities to Inform, Disseminate	
21	24	Flyers	0 - No response to item 1 - Item or activity reported
22	25	Letters	
23	26	Combination of media	
24	27	Special events	
25	28	Other activities to inform	
26	29	Response quality	0 - Response to item in Section II 1 - No response to Section II 2 - Section II not applicable
		III. Means of Identifying Veteran Population	
		A. Use of Namelists	
27	30	Veterans organizations (other than VA)	0 - No response to item 1 - Item or activity reported
28	31	Government agencies	
29	32	Veterans Administration	
30	33	Educational institutions	
31	34	Military bases	

Variable Number	Tape Position	Variable Description	Valid Codes
32	35	Other namelists	0 - No response to item 1 - Item or activity reported
		B. Direct Contact with Veterans	
33	36	Schools and colleges	
34	37	Places of employment	
35	38	Community Agencies	
36	39	Military bases	
37	40	C. Identification of Veteran Population by Other Means	
38	41	D. Response Quality	0 - Response to item in Section III 1 - No response to Section III 2 - Section III not applicable
		Recruitment: Item 12 B	
		IV. OVA Techniques	
39	42	A. General Use of Techniques - no details	0 - No response to item 1 - Item or activity reported
		B. Indirect Techniques Used by OVA	
40	43	Publications	
41	44	Local newspaper releases	
42	45	Outdoor advertising	
43	46	Institution's recruitment materials	
44	47	Distribution of pamphlets	
45	48	Radio and/or TV spots	
46	49	Return postal card	
47	50	Contact with other agencies	
48	51	Pens, stickers, and gimmicks	

Variable Number	Tape Position	Variable Description	Valid Codes
		C. Direct Contact Techniques Used by OVA	
49	52	Direct contact	0 - No response to item 1 - Item or activity reported
50	53	Contacts in minority communities	
51	54	Personal appearance at strategic locations	
52	55	Presentations at schools	
53	56	Visit military bases	
54	57	Visit agencies	
55	58	Telephone contact	
56	59	Letters	
57	60	Attend off-campus registrations	
58	61	Personal contacts	
59	62	D. Response Quality	0 - Response to item in Section IV 1 - No response to Section IV 2 - Section IV not applicable
		V. Comment on Recruitment Successes	
60	63	A. States Satisfaction - no specifics	0 - No response to item 1 - Item or activity reported
		B. Fruitful Endeavors	
61	64	Personal appearances	
62	65	Joint efforts	
63	66	Work at military bases	
64	67	Use of vet survey	
65	68	Advertising	
		C. Outcomes	
66	69	Large number vets contacted	

Variable Number	Tape Position	Variable Description	Valid Codes
67	70	Increase in veteran enrollment	0 - No response to item 1 - Item or activity reported
68	71	Maintained level of enrollment	
69	72	Good feedback on OVA	
70	73	Increase in admissions inquiries	
71	74	D. Response Quality	0 - Response to item in Section V 1 - No response to Section V 2 - Section V not applicable
		VI. Comment on Recruitment Difficulties	
72	75	A. States Failure - no details	0 - No response to item 1 - Item or activity reported
		B. Related to Recruitment Effort	
73	76	Vets had to leave	
74	77	Decrease in enrollment	
75	78	Not broad enough program	
76	79	Minimal contact	
77	80	Recruitment setback	
78	81	Minimal success	
79	82	Other "related to recruitment effort"	
		C. Unsuccessful Practices	
80	83	Mailings	
81	84	Advertising	
82	85	Other unsuccessful practices	
83	86	D. Response Quality	0 - Response to item in Section VI 1 - No response to Section VI 2 - Section VI not applicable

Variable Number	Tape Position	Variable Description	Valid Codes
		Special Education: Item 12 C	
		VII. **Coordination of Special Education**	
84	87	Nature of activity	0 - No response to item 1 - OVA coordinates and refers only 2 - OVA provides all services 3 - OVA provides services and refers
85	88	Response Quality	0 - Response to item in Section VII 1 - No response to Section VII 2 - Section VII not applicable
		VIII. **Available Services**	
86	89	A. General Services Available	0 - No response to item 1 - Item or activity reported
		B. Remedial, Compensatory, Developmental	
87	90	General remedial services	
88	91	Mathematics	
89	92	English	
90	93	Reading	
91	94	Study skills	
92	95	Other academics	
93	96	GED	
94	97	ABE	
95	98	Other remedial, compensatory, developmental service	
		C. Motivational	
96	99	General--motivational services	
97	100	Career workshop	

Variable Number	Tape Position	Variable Description	Valid Codes
98	101	Personal development	0 - No response to item 1 - Item or activity reported
99	102	College life	
		D. Tutorial	
100	103	General tutoring services	
101	104	Study center	
		E. Selected Related Practices	
102	105	Testing	
103	106	Network of tutors	
104	107	Refer vets to SS, UB	
105	108	Special courses developed	
106	109	Periodic conferences	
107	110	F. Response Quality	0 - Response to item in Section VIII 1 - No response to Section VIII 2 - Section VIII not applicable
IX.	Number of Veterans Receiving Special Education Services		
108	111	Total	0 - No response to item 1 - None 2 - 1-99 3 - 100-499 4 - 500 +
109	112	OVA can't determine figure	0 - No response to item 1 - Item or activity reported
110	113	Coder can't determine figure	
111	114	Response Quality	0 - Response to item in Section IX 1 - No response to Section IX 2 - Section IX not applicable 3 - Duplicated count

Variable Number	Tape Position	Variable Description	Valid Codes
		X. Number of Veterans Served Under VA Sections	
112	115	A. Section 1691	0 - No response 1 - None 2 - 1-99 3 - 100-299 4 - 300 +
113	116	B. Section 1692	0 - No response 1 - None 2 - 1-99 3 - 100-299 4 - 300 +
114	117	C. Section 1696	0 - No response 1 - None 2 - 1-99 3 - 100-299 4 - 300 +
115	118	D. Total Number of Veterans Served	0 - No response 1 - None 2 - 1-99 3 - 100-499 4 - 500 + 5 - OVA can't determine total 6 - Coder can't determine total
116	119	E. Response Quality	0 - Response to item in Section X 1 - No response to Section X 2 - Section X not applicable

Counseling: Item 12 D

Variable Number	Tape Position	Variable Description	Valid Codes
		XI. Professional Assistance Available to Veterans	
117	120	A. Counseling Services Available--no specifics	0 - No response to item 1 - Item or activity reported
		B. Services Available	
118	121	Personal	
119	122	Family	

Variable Number	Tape Position	Variable Description	Valid Codes
120	123	Career	0 - No response to item 1 - Item or activity reported
121	124	Educational	
122	125	Financial	
123	126	Legal	
124	127	Health	
125	128	Veterans	
126	129	Job placement	
127	130	Other services	
128	131	Response Quality	0 - Response to item in Section XI 1 - No response to Section XI 2 - Section XI not applicable

XII. Coordination

Variable Number	Tape Position	Variable Description	Valid Codes
129	132	Activity	0 - No response 1 - OVA does all counseling 2 - OVA refers only 3 - OVA provides services and refers
130	133	Response Quality	0 - Response to item in Section XII 1 - No response to Section XII 2 - Section XII not applicable

XIII. Number of Veterans Receiving Counseling Services

Variable Number	Tape Position	Variable Description	Valid Codes
131	134	Total	0 - No response 1 - None served 2 - 1-99 3 - 100-499 4 - 500-999 5 - 1000 +

Variable Number	Tape Position	Variable Description	Valid Codes
132	135	OVA can't determine figure	0 - No response to item 1 - Item or activity reported
133	136	Coder can't determine figure	
134	137	Response Quality	0 - Response to item in Section XIII 1 - No response to Section XIII 2 - Section XIII not applicable

XIV. Number of Veterans Referred for Counseling Services

Variable Number	Tape Position	Variable Description	Valid Codes
135	138	Total	0 - No response 1 - None referred 2 - 1-99 3 - 100-499 4 - 500-999 5 - 1000 +
136	139	OVA can't determine figure	0 - No response to item 1 - Item or activity reported
137	140	Coder can't determine figure	
138	141	Response Quality	0 - Response to item in Section XIV 1 - No response to Section XIV 2 - Section XIV not applicable

XV. Problems and Resolutions: POR Item 13

A. VA-Related Problems and Resolutions

Variable Number	Tape Position	Variable Description	Valid Codes
139	142	Problem A: Late VA checks	0 - No response to item 1 - Item or activity reported
140	143	Resolution(s) for Problem A	
141	144	Problem B: No lists of recently released vets	
142	145	Resolution(s) for Problem B	
143	146	Problem C: Lack of OVA staff	
144	147	Resolution(s) for Problem C	
145	148	Problem D: Complex administrative requirements posed by VA	

Variable Number	Tape Position	Variable Description	Valid Codes
146	149	Resolution(s) for Problem D	0 - No response to item 1 - Item or activity reported
147	150	Problem E: No approval for work-study placements	
148	151	Resolution(s) for Problem E	
149	152	Problem F: Limited funding or funding cuts	
150	153	Resolution(s) for Problem F	
151	154	Problem G: Delimitation date resulting in fewer vets	
152	155	Resolution(s) for Problem G	
		B. OVA-Related Problems and Resolutions	
153	156	Problem H: Limited Staff	
154	157	Resolution(s) for Problem H	
155	158	Problem I: Overpayments to veterans	
156	159	Resolution(s) for Problem I	
157	160	Problem J: OVA staff turnover	
158	161	Resolution(s) for Problem J	
159	162	Problem K: Difficult access to records	
160	163	Resolution(s) for Problem K	
161	164	Problem L: Not enough emphasis on related services	
162	165	Resolution(s) for Problem L	
163	166	Problem M: Staff or outside agencies limited	
164	167	Resolution(s) for Problem M	
165	168	Problem N: OVA activities not adequate	

Variable Number	Tape Position	Variable Description	Valid Codes
166	169	Resolution(s) for Problem N	0 - No response to item 1 - Item or activity reported
167	170	Problem O: Recognition of OVA	
168	171	Resolution(s) for Problem O	
169	172	Problem P: Poor location; inadequate space	
170	173	Resolution(s) for Problem P	
		C. Student-Related Problems and Resolutions	
171	174	Problem Q: Hardships caused to veterans	
172	175	Resolution(s) for Problem Q	
173	176	Problem R: Motivating students	
174	177	Resolution(s) for Problem R	
175	178	Problem S: Students don't seek counseling on their own	
176	179	Resolution(s) for Problem S	
		D. Other Problems	
177	180	Any other problems	
178	181	General	0 - No response 1 - Mentioned ONLY problems(s) and solutions(s) for period OTHER than 1974-75 2 - Mentioned ONLY minor problems and so designated them 3 - Stated that there were NO major problems (or no problems)
179	182	Response Quality	0 - Response to item in Section XV 1 - No Response to Section XV 2 - Section XV not applicable

Variable Number	Tape Position	Variable Description	Valid Codes
		XVI. Coordinator's Highest Educational Level	
180	183	A. Educational Level	0 - No response 1 - Less than BA 2 - Bachelors 3 - Masters 4 - Doctoral 5 - Other
181	184	B. Response Quality	0 - Response to item in Section XVI 1 - No response to Section XVI 2 - Section XVI not applicable
		XVII. Coordinator's Qualifications	
182	185	A. General Qualifications - no specifics	0 - No response to item 1 - Item or activity reported
		B. Specific Qualifications	
183	186	Public relations	
184	187	Management administrative	
185	188	Guidance, counseling	
186	189	Helping professions, community work	
187	190	Worked for VA or with veterans	
188	191	Worked in the military	
189	192	C. Response Quality	0 - Response to item in Section XVII 1 - No response to Section XVII 2 - Section XVII not applicable
		XVIII. Veteran Status of Coordinator	
190	193	A. Veteran Status (Vietnam era or any era)	0 - No response 1 - A veteran 2 - Not a veteran 3 - Response given, but not clear

Variable Number	Tape Position	Variable Description	Valid Codes
191	194	B. Response Quality	0 - Response to item in Section XVIII 1 - No response to Section XVIII 2 - Section XVIII not applicable
	XIX.	(List) Major Responsibilities of Coordinator	
192	195	A. General duties - no specifics	0 - No response to item 1 - Item or activity reported
		B. Direct Participation	
193	196	Outreach	
194	197	Recruitment	
195	198	Counseling	
196	199	Special Education, Tutoring	
197	200	Benefits, veterans problems	
198	201	Registration, student records	
199	202	Job placement, interviews, training	
200	203	Referral	
201	204	Teaching	
202	205	Other direct participation	
		C. Supervision and Monitoring	
203	206	Supervise staff	
204	207	Supervise/coordinate staff training	
205	208	Supervise recruitment	
206	209	Direct outreach efforts	
207	210	Establish special ed, tutorials	
208	211	Work-study students	
209	212	Counseling functions	

Variable Number	Tape Position	Variable Description	Valid Codes
210	213	Referral	0 - No response to item 1 - Item or activity reported
211	214	Other supervisory functions	
		D. Communication	
212	215	Use advisory committee	
213	216	Keep informed	
214	217	PR and information services	
215	218	Liaison with community	
216	219	Liaison among institution, VA, HEW, and other OVAs	
217	220	Liaison with institutional staff	
218	221	Other communication responsibilities	
		E. Program Management	
219	222	Plan, implement total program	
220	223	Conduct business	
221	224	Coordinate services	
222	225	Other	
223	226	F. Response Quality	0 - Response to item in Section XIX 1 - No response to Section XIX 2 - Section XIX not applicable
		XX. Why Veterans are Effectively Served	
224	227	A. General - Positive Response, no specifics	0 - No response to item 1 - Item or activity reported
		B. OVA Office and Staff	
225	228	OVA office central to campus	
226	229	OVA qualified staff	
227	230	OVA staff mostly veterans	

Variable Number	Tape Position	Variable Description	Valid Codes
228	231	Other office and staff	0 - No response to item 1 - Item or activity reported
		C. Qualities of OVA	
229	232	Responsive	
230	233	Solve problems	
231	234	Advocacy role for veterans	
232	235	OVA serves liaison role	
233	236	OVA personalized service	
234	237	Other OVA qualities	
		D. Outside Agencies	
235	238	Cooperation with VA and/or HEW	
236	239	Cooperation from Institution	
237	240	Cooperation with other agencies	
238	241	Useful advisory committee	
239	242	Personalized education by Institution	
		E. Ova Basic Services	
240	243	Outreach activity	
241	244	Recruitment activity	
242	245	Special education activity	
243	246	Counseling activity	
244	247	Referral system within Institution	
245	248	Referral system outside Institution	
246	249	Other OVA basic services	
247	250	F. Response Quality	0 - Response to item in Section XX 1 - No response to Section XX 2 - Section XX not applicable

Variable Number	Tape Position	Variable Description	Valid Codes
		XXI. Selected Other Material in POR	
		A. Outreach	
248	251	Budget constraints	0 - No response to item 1 - Item or activity reported
249	252	Other vets' needs	
250	253	Work with Upward Bound project	
251	254	Satisfactory % of vets contacted have enrolled	
252	255	Contact those who normally come in contact with vets	
253	256	Train a special group of outreach workers	
254	257	Other outreach	
		B. Recruitment	
255	258	Outreach and recruitment overlap	
256	259	Vet recruitment integrated	
257	260	Meet with OVA colleagues	
258	261	Other recruitment	
		C. Special Education	
259	262	Remedial work is referred off-campus	
260	263	Students can cross-register	
261	264	Satisfactory % of vets in Special Education	
262	265	Vets share same remedial training/resources	
263	266	Tutorial benefits have not been promoted	
264	267	Other Special Education	

Variable Number	Tape Position	Variable Description	Valid Codes
		D. Counseling	
265	268	Students required to review program	0 - No response to item 1 - Item or activity reported
266	269	Placement test automatically given	
267	270	Career/personal counseling to non-student veterans	
268	271	Veteran's counselor	
269	272	Counseling on a scheduled basis	
270	273	Other counseling	
271	274	E. Institutional Commitment, Activities, Policy Changes, Etc. - General	
272	275	F. Response Quality - no response to Section XXI	0 - Response to item in Section XXI 1 - No response to Section XXI 2 - Section XXI not applicable
273	276	Rating Occasion	1 - First rating occasion 2 - Second rating occasion
274	277	Rater	1 - Rater one 2 - Rater two 3 - Rater three

Appendix G

Generalizability Analysis

Appendix G

Generalizability Analysis

A. Introduction

This appendix describes the method used to assess the reliability of the ratings produced by following the categorization system put forth in the Coder's Guide/Standardized Categorization Manual. In addition, related questions dealing with the number of raters necessary to achieve a desired level of reliability and possible differences in reliability associated with types (individual raw data items versus variable composites) and difficulties of items (hard-to-rate versus easy-to-rate) are also be addressed.

Classically, in reporting the stability of a rating instrument separate indices of inter-rater (lack of agreement among raters) and intra-rater (lack of agreement among raters from occasion to occasion) reliabilities are usually cited. Each index is calculated from a ratio of "true"-score variance, i.e., variance attributed to true differences between individuals or institutions on characteristics (variable composites) or items (raw data elements) and observed-score variance, i.e., variance attributed to true differences plus variance caused by error associated with a variety of unknown sources. In the present case, however, a generalizability study, which produces a single coefficient, was the method chosen (Cronbach et al., 1972). This approach appears to be superior to the "classical" method, since it enables one to better isolate, and thus identify the various sources of "error." The generalizability procedure performs this function through an approach that can be likened to a regression model in which scores are estimated through a linear combination of factors thought to be important in explaining the variance. If the factors for a regression model are carefully chosen, and add to the explained variance, a better estimate will be obtained. The same may be said of the generalizability coefficient, i.e., if those conditions believed to produce systematic variation in the test scores or ratings are included in the generalizability (G) study, then a better estimate of the measure's reliability may be reached when it is applied to a situation in which a decision must be made. As for uncontrolled factors or facets (the term used by Cronbach et al., 1972), they become part of the residual or generic error in the "classical" reliability sense.

Although it may not be apparent from the above description, the generalizability approach is, in fact, a two-step process. The first step concerns the G study, in which the pertinent facets are identified, included in the design, and the analysis performed. A second step is the decision (D) study, in which the test or rating procedures are actually applied and upon which decisions are made or conclusions reached; for example, whether or not a program has a certain component or characteristic. The variance components associated with sources of error and true-score which are estimated in the G study through an Analysis of Variance are used to calculate the stability of the instruments or rating procedures when they are used to make decisions in the D study. Obviously, in order to estimate the variance components associate with facets of interest in a D study, the G study must include them in the research design. The objectives of the D study, therefore, should dictate the design of the G study. For example, if in an application of an instrument on which decisions are to be made (the D study), two raters are to judge a student's performance on a motor-task on a number of occasions and their ratings are to be averaged, then a rater and an occasions facet must be included in the G study design in order that variance components associated with these possible sources of error may be estimated.

The mechanics of the G study provides variance estimates appropriate for calculating the reliability of a rating based upon a single individual's judgment on one occasion. These variance components may then be multiplied by weights that reflect the number of raters and occasions actually used in the D study. A generalizability coefficient for the D study can then be calculated based upon the conditions of the specific application. This recognition that conditions may differ between G and D studies may be contrasted to classic reliability studies in which it is assumed (often contrary to actual practice) that the conditions used to estimate the stability index in test development will remain constant across all applications.

B. The Design

In the present investigation, the objective was to rate Program Operations Reports of VCIP projects along 67 logical characteristics (variable composites) or variable classes that were determined via a content analysis. Whether or not a project had one of these global characteristics was determined simply by the presence or absence of one of a number of individual indicator-items subsumed under each of the 67 characteristics. There were 307 raw data items and every report was given a score of zero or one on each of them.[1] A rater was to read a Program Operations Report and check whether the description of the program included any indicators which signify the presence of the desired global characteristics. If any one of the indicator-items signifying a given characteristic was checked, then the Program was said to include that characteristic as part of its makeup. Individuals rating the reports on the various characteristics were expected to do so in a consistent manner with a minimum of training. Moreover, the rating procedure was expected to produce agreement between raters when used to evalute any Program Operations Report on any given characteristic or indicator-item. These objectives immediately point to the value of controlling for variation in the G study between raters (inter-rater reliability) and variation within raters over occasions (intra-rater reliability).

Additionally, since every Program Operations Report was judged on every characteristic, a profile of scores or ratings was produced for each report. The pattern of a subset of these profiles was also analyzed for consistency over raters and occasions.

For both the 67 characteristics and indicator items, the variance components due to true-score variation (the variance attributable to "true" differences between the Program Operations Reports on the characteristic) and the various sources of error were estimated through a univariate analysis of variance (ANOVA). However, comparable estimates of variance components associated with profile scores were dealt with through a multivariate approach. These two methods were subsumed in the G study under one overall fully crossed design in which three raters judged 30 Program Operations Reports on two different occasions. The same reports were used both times. Thus, each rater made 9,210 separate judgments (307 item characteristics x 30 reports) on two occasions. The order in which the 30 reports were rated by each of the three raters on the two occasions was random.

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[1] Individual indicator-items (see Appendix D) were used to indicate the presence or absence of the 67 logical variable classes or global characteristics determined on the basis of *a priori* considerations. The 67 variable characteristics were determined by joint decisions of RTI, OPBE, VPB, and are listed is Appendix A.

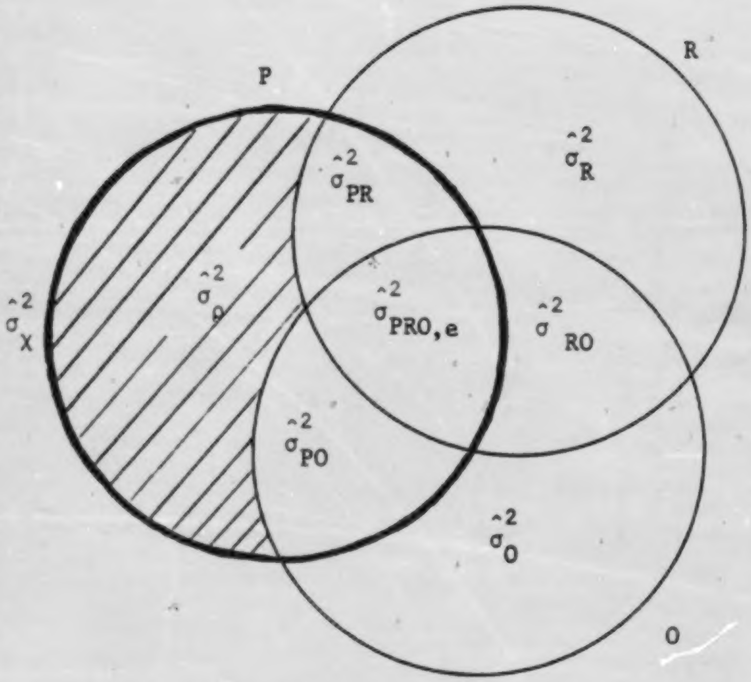
This general design is presented schematically in Figure G.1. In "classical" reliability terms the heavily lined circle of Figure 1 represents the observed-score variance ($\hat{\sigma}^2_X$). Within the observed-score circle, three interactions represent possible sources of error. The PR interaction reflects lack of agreement across raters (inter-rater error) and variance attributable to this form of error is indicated by $\hat{\sigma}^2_{PR}$. The PO interaction represents within-rater differences from the first to second rating (intra-rater error) and variance attributable to this source of error is indicated by $\hat{\sigma}^2_{PO}$. The PRO,e interaction represents any other lack of consistency between two ratings of the same report by the same rater; variance attributable to this source of error is indicated by $\hat{\sigma}^2_{PRO,e}$. The lined section represents the true-score variance ($\hat{\sigma}^2_{\rho}$) or true difference between projects on any given characteristic or item.

This illustration makes it clear that through the G study it is possible both to identify the various sources of error and to judge their order of magnitude as well as to assess how many raters are needed to yield a desired level of reliability (much in the same manner that the Spearman-Brown prophecy formula allows one to determine the number of items needed for a given reliability). Further, it becomes apparent that, as stated above, unless all facets of interest are included in the G study, design one will limit the number and kinds of generalizations that can be made in the D study. Additionally, it can also be seen that an overall index of stability may be calculated. This generalizability coefficient ($\hat{\xi}^2_{\rho}$) is estimated, in the same manner as more traditional reliability indices, by the ratio of the true-score variance to the observed-score variance. As in the present case,

$$\frac{\hat{\sigma}^2_{\rho}}{\hat{\sigma}^2_{\rho} + \hat{\sigma}^2_{PR} + \hat{\sigma}^2_{PO} + \hat{\sigma}^2_{PRO,e}} .$$

For the univariate case, the analysis took place at two levels--the variable class and the item levels. The first of these levels involved

Figure G.1 Schematic Representation of the Variance Components for the VCIP Generalizability Study.


P
R
O
$\hat{\sigma}^2_X$
$\hat{\sigma}^2_\rho$
$\hat{\sigma}^2_{PR}$
$\hat{\sigma}^2_R$
$\hat{\sigma}^2_{PRO,e}$
$\hat{\sigma}^2_{RO}$
$\hat{\sigma}^2_{PO}$
$\hat{\sigma}^2_O$

P = Program Operations Reports

O = Occasions

R = Raters

$\hat{\sigma}^2_X$ = Observed-score variance

$\hat{\sigma}^2_\rho$ = True-score variance

$\hat{\sigma}^2_O$ = Occasion variance

$\hat{\sigma}^2_R$ = Rater variance

$\hat{\sigma}^2_{PR}$ = Variance attributable to inter-rater error

$\hat{\sigma}^2_{PO}$ = Variance attributable to intra-rater error

$\hat{\sigma}^2_{RO}$ = Rater by Occasion interaction variance

$\hat{\sigma}^2_{PRO,e}$ = Variance attributable to other rating inconsistencies

G studies on all 67 characteristics plus two other generalizability analyses that produced coefficients used to compare the stability of ratings between characteristics deemed hard-to-rate and those labeled easy-to-rate. The hard/easy designation for each of the 67 characteristics was reached at the end of the rating session through consensus among the raters. A random sample of five hard-to-rate characteristics and five easy-to-rate characteristics was used in the analyses.

For the second or indicator-item level, G coefficients and variance estimates were generated for each indicator-item taken independently, i.e., not subsumed under characteristics. Additionally, items were also classified as easy-to-rate or hard-to-rate. Ten indicator items from each of these categories were chosen and the stability of their ratings compared.

Prior to these analyses, items which generated few or no responses were eliminated. This was done by dropping all items which produced zero frequencies or only accounted for a small percentage of responses (e.g., less than 25%). This resulted in a reduced item set made up of 206 entries. In some 31 cases this elimination of items produced characteristic or variable classes that were composed of single items. In 36 cases, however, the characteristics covered several indicator items (see Appendix A).

In the multivariate case, the analysis was also performed at two levels. The first, the characteristic or variable class level, produced a generalizability coefficient for each of the previously discussed subsets of five easy-to-rate and five hard-to-rate characteristics. A second pair of multivariate G's was also calculated at the indicator item level for the sets of ten easy-to-rate and hard-to-rate items.

As stated, the G study design was basic to both the MANOVA and ANOVA analyses. In order to simplify the MANOVA procedures, it was assumed that conditions within the raters and occasions facets had been sampled independently from each other. This assumption resulted in a simplified analysis since the covariance components between the two facets reduced to zero and dropped out of the calculations. This assumption was fully justified by the random assignment of reports to raters.

All reports from sampled schools (sample size = 400) were rated in the D study using only one rater for each report. The stability of this rater's evaluations and the amount of agreement among raters, if they were all to rate the same report, can be estimated using the coefficients derived from the G study. In addition, given the estimated variance components it is possible to determine the number of raters needed to yield a desired G coefficient. This may be done at both the characteristic and item levels. With the use of more than one rater judging each report in a D study, the ratings would be averaged, producing a better estimate and thus boosting reliability. A more detailed discussion of the use of G study information in D study applications may be found in section I below.

C. The Estimation of Variance Components

1. The Univariate Case

As stated, the variance components necessary to make judgments about the stability of the ratings both among raters and over occasions may be generated for each characteristic through a series of separate ANOVA's at the characteristic level and ANOVA's at the reduced indicator-item level. Table G.1[2] lays out the typical P x R x O design and provides the sources of variance, their degrees of freedom, the associated mean squares, and the equations for the corresponding expected mean squares. As can be seen, these sources of variance correspond to those presented in Figure G.1.

Once an ANOVA had been run and the mean squares calculated, each of the variance components that were required for the G study were determined through the following set of equations:

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[2] One institution was eliminated from the G study analyses on the basis of missing data to variables selected for inclusion in determining the multivariate generalizability coefficient.

$$* \ \hat{\sigma}^2_{PRO,e} = MS_{PRO,e}$$

$$\hat{\sigma}^2_{RO} = (MS_{RO} - MS_{PRO,e})/29$$

$$* \ \hat{\sigma}^2_{PO} = (MS_{PO} - MS_{PRO,e})/3$$

$$* \ \hat{\sigma}^2_{PR} = (MS_{PR} - MS_{PRO,e})/2$$

$$\hat{\sigma}^2_{O} = (MS_{O} - MS_{PO} - MS_{RO} + MS_{PRO,e})/87$$

$$\hat{\sigma}^2_{R} = (MS_{R} - MS_{RO} - MS_{PR} + MS_{PRO,e})/87$$

$$* \ \hat{\sigma}^2_{\rho} = (MS_{P} - MS_{PO} - MS_{PR} + MS_{PRO,e})/6$$

These equations are based upon the expected mean squares presented in Table G.1. The starred components sum to the observed score variance $\hat{\sigma}^2_X$.

Table G.1

TYPICAL ANOVA TABLE FOR THE P x R x O DESIGN

Source*	df**	MS	E(MS)
P	28	MSP	$\sigma^2_{PRO,e} + 3\sigma^2_{PO} + 2\sigma^2_{PR} + 6\sigma^2_{P}$
R	2	MS_R	$\sigma^2_{PRO,e} + 29\sigma^2_{RP} + 2\sigma^2_{PR} + 58\sigma^2_{R}$
O	1	MS_O	$\sigma^2_{PRO,e} + 29\sigma^2_{RO} + 3\sigma^2_{PO} + 87\sigma^2_{O}$
PR	56	MS_{PR}	$\sigma^2_{PRO,e} + 2\sigma^2_{PR}$
PO	28	MS_{PO}	$\sigma^2_{PRO,e} + 3\sigma^2_{PO}$
RO	2	MS_{RO}	$\sigma^2_{PRO,e} + 29\sigma^2_{RO}$
PRO,e	56	$MS_{PRO,e}$	$\sigma^2_{PRO,e}$

* P = Program Operation Reports, R = Raters, O = Occasions.

** Degrees of freedom based on 29 Program Operations Reports, 3 Raters, and 2 Occasions.

2. The Multivariate Case

In the multivariate case what was desired was an overall generalizability index associated with a pattern of scores rather than with a single variable. While the previous discussion under Section C.1. concerned univariate components arising from a variety of sources for each characteristic and indicator-item, in the multivariate case it was necessary to treat variance-covariance matrices (Σ) due to those same sources across patterns of characteristics (5 easy-to-rate, 5 hard-to-rate) and indicator-items (10 easy-to-rate, 10 hard-to-rate). Fortunately, the bulk of the preceding exposition may be directly applied to this situation through the simple expedient of replacing the σ^2's with Σ's. Table G.2 is the analysis of variance table for the multivariate case, in which variance components have been replaced by this variance-covariance matrix analogue.

Table G.2

MANOVA TABLE FOR THE P x R x O DESIGN

Source	df	Mean Squares and Cross Products	E(MSCP)*
P	29	$MSCP_P$	$\Sigma_{PRO,e} + 3\Sigma_{PO} + 2\Sigma_{PR} + 6\Sigma_P$
R	2	$MSCP_R$	$\Sigma_{PRO,e} + 29\Sigma_{RO} + 2\Sigma_{PR} + 58\Sigma_R$
O	1	$MSCP_O$	$\Sigma_{PRO,e} + 29\Sigma_{RO} + 3\Sigma_{PO} + 87\Sigma_O$
PR	58	$MSCP_{PR}$	$\Sigma_{PRO,e} + 2\Sigma_{PR}$
PO	29	$MSCP_{PO}$	$\Sigma_{PRO,e} + 3\Sigma_{PO}$
RO	2	$MSCP_{RO}$	$\Sigma_{PRO,e} + 29\Sigma_{RO}$
PRO,e	58	$MSCP_{PRO,e}$	$\Sigma_{PRO,e}$

* MSCP = Mean Squares and Cross Products

Just as $\hat{\sigma}^2$ terms associated with different sources of error were combined in the univariate case, similar matrix operations were performed in the multivariate case. The equations used to calculate the variance components for the multivariate case were:

$$* \ \hat{\Sigma}_{PRO,e} = MSCP_{PRO,e}$$

$$\hat{\Sigma}_{RO} = (MSCP_{RO} - MSCP_{PRO,e})/29$$

$$* \ \hat{\Sigma}_{PO} = (MSCP_{PO} - MSCP_{PRO,e})/3$$

$$* \ \hat{\Sigma}_{PR} = (MSCP_{PR} - MSCP_{PRO,e})2$$

$$\hat{\Sigma}_{O} = (MSCP_{O} - MSCP_{RO} + MSCP_{PRO,e})/87$$

$$\hat{\Sigma}_{R} = (MSCP_{R} - MSCP_{RO} - MSCP_{PR} + MSCP_{PRO,e})/58$$

$$* \ \hat{\Sigma}_{\rho} = (MSCP_{P} - MSCP_{PR} + MSCP_{PRO,e})/6$$

Once again the starred components sum to the observed score variance which is expressed in matrix terms as:

$$\hat{\Sigma}_{OBS} = \hat{\Sigma}_{\rho} + \frac{1}{R}\hat{\Sigma}_{PR} + \frac{1}{O}\hat{\Sigma}_{PO} + \frac{1}{RO}\hat{\Sigma}_{PRO,e}$$

The universe or true score variance-covariance term is simply $\hat{\Sigma}_{\rho}$.

Two approaches were taken to produce a multivariate version of $\hat{\xi}^2_{\rho}$. In the first, as described by Bock (1975), the generalized variance associated with the variance-covariance matrix was assessed by simply evaluating its determinant. Thus, given the generalized universe variance $\hat{\Sigma}_{\rho}$ and the observed variance $\hat{\Sigma}_{OBS}$, the multivariate generalizability is calculated as the ratio of these two determinants:

$$\hat{\xi}^2_{\rho} = \frac{\hat{\Sigma}_{\rho}}{\hat{\Sigma}_{OBS}} \quad .$$

While this approach appears to be an original extension of generalizability theory, the characteristics of the multivariate $\hat{\xi}^2_{\rho}$ are similar to those of the univariate case. For instance, if the elements of the true-score covariance matrix, $\hat{\Sigma}_\rho$, are similar in size and pattern to the elements of the observed-score covariance matrix, $\hat{\Sigma}_{OBS}$, then the two determinants will be close in magnitude and $\hat{\xi}^2_\rho$ will be close to one. However, the incidence of zero values in a row and column of $\hat{\Sigma}_\rho$ produces a determinant of $\hat{\Sigma}_\rho$ that will be zero. This indicates, as it should, that the "stability" of a pattern of variables, when one or more of its members is completely "unstable," is zero.

The second approach by which the multivariate G coefficients were estimated was through the use of the largest characteristic roots of these variance-covariance matrices. Rather than forming the ratio of $\hat{\Sigma}_\rho$ and $\hat{\Sigma}_{OBS}$, the largest latent root of each of these matrices was extracted and their ratios computed. This approach results in a multivariate G which estimates the generalizability associated with a linear composite of those variables which maximally accounts for the variance associated with each of the two components.

The sums of squares and cross products due to various sources (program, program by occasion interaction, program by rater interaction, program by occasion by rater interaction) and the estimated variance-covariance matrices are presented in tables G.7 through G.14 at the end of this appendix.

D. Results of the G Study

1. Univariate Analyses

Variance components and ratios of true-score variance to observed score variance were calculated for each of the characteristics and indicator items. The numerical results are presented as Table G.5 at the end of this appendix. As can be seen from inspection of Table G.5, the estimated generalizabilities are quite low. This is true for both characteristics and indicator items where the average coefficients were approximately .38 and .23, respectively. The low coefficients for characteristics might be somewhat surprising since a number of items entered into each; however, the reader should keep in mind that the characteristics were not formed from a linear combination of indicator items. Thus, the increase in the ratio of true-score variance to observed score variance usually associated with the use of a linear combination of items to produce a composite cannot be expected in the present case.

2. Comparisons of Generalizability Coefficients Between Hard-to-Rate and Easy-to-Rate Characteristics and Indicator Item

As can be seen from Table G.3, the overall difference between G coefficients of characteristics and items noted above is maintained in the present sample of items and characteristics. Within characteristics, there is little if any difference in the generalizability coefficients associated with the hard-to-rate and easy-to-rate classification. In the case of the sampled items, the average generalizability coefficient for easy-to-rate items is .40 while that for the hard-to-rate items is .25. In neither case, however, do the average generalizabilities approach acceptable levels.

Table G.3

Average Generalizability Coefficients for Easy-to-Rate and Hard-to-Rate Indicator Items and Characteristics

	Items	Characteristics
Easy-to-Rate	.40 n=10	.53 n=5
Hard-to-Rate	.25 n=9	.47 n=5

3. Multivariate Analyses

As mentioned earlier, the multivariate analyses were restricted to those indicator items and characteristics involved in the hard-to-rate, easy-to-rate comparisons. The sums of squares and cross products and estimated variance-covariance matrices associated with observed and true scores are presented in Table G.4. The multivariate generalizability coefficients based on the largest latent roots and on the determinants are also presented in Table G.4. The results indicate that all the coefficients based on the determinants are virtually zero. In most cases this is a function of the presence of one or more variables with a very low univariate generalizability coefficient resulting in an unstable pattern. In the case of the multivariate coefficients based on

Table G.4

Multivariate Generalizability Coefficients* for Easy-to-Rate and Hard-to-Rate Indicator Items and Characteristics

	Characteristics	Indicator Item
Hard-to-Rate	.76 (0) n=5	.74 (0) n=9
Easy-to-Rate	.95 (.0056) n=5	.78 (0) n=10

* Coefficients based on the ratios of largest latent roots are presented first with coefficients based on the ratios of determinants in parentheses.

the largest latent roots, nearly all values exceeded .75. This is because the largest latent root approach maximizes the variance of the linear composites of those variables involved. This is borne out by examining the univariate coefficients of the variables in each cell of Table G.5, which shows that the generalizability coefficients based on the largest latent root are very close in magnitude to the largest single univariate coefficient included in the G coefficient calculation. It would appear, therefore, that the utility of applying either multivariate generalizability coefficient to these data was somewhat limited. A coefficient based on the largest latent roots produced a value slightly larger than the largest univariate coefficient of the profile variables while the coefficient using determinants was smaller than the smallest univariate coefficient. Little information was gained, therefore, considering the substantial increase in computational effort needed in a multivariate approach relative to a univariate analyses.

Given the lack of utility of the multivariate approach in the present application and the nature of the findings, it appears that in order to select those items that will produce the most reliable combination or profile of items one should attend to the univariate results. As discussed, both multivariate analyses were restricted by the limits of the univariate Gs that made them up. Therefore, simply taking those items with the highest univariate coefficients would in all liklihood, produce as good a combination of items as any more elaborate multivariate strategy.

E. Procedures for the Estimation of D Study Variance Components and Generalizability Coefficients

As stated, Table G.5 presents the univariate estimates of variance components based upon the procedures described in this appendix. If decisions are to be made on the basis of one and only one rater (R) judging a Program Operations Report (P) on one and only one occasion (O), then the tabulated estimates of G found in this appendix may be used directly to estimate the stability/reliability of a rating on any given variable. The following formula was used to calculate the G coefficients of Table G.5:

$$\hat{\xi}^2_\rho = \frac{\hat{\sigma}^2_\rho}{\hat{\sigma}^2_P + \hat{\sigma}^2_{PR} + \hat{\sigma}^2_{PO} + \hat{\sigma}^2_{PRO,e}}$$

As stated elsewhere, this formula is actually the familiar "true" score variance over "observed" score variance ratio so often used as a definition of classical reliability. If, however, Program Operations Reports are to be judged by more than one rater and/or on more than one occasion with each variable formed by averaging judgment over raters and occasions, estimates of the generalizability coefficients must be altered to reflect the modified procedure. The estimating formula to be used is:

$$\hat{\xi}^2_\rho = \frac{\hat{\sigma}^2_\rho}{\hat{\sigma}^2_P + \frac{\hat{\sigma}^2_{PR}}{N_R} + \frac{\hat{\sigma}^2_{PO}}{N_O} + \frac{\hat{\sigma}^2_{PRO,e}}{N_R N_O}}$$

where, N_R equals the number of raters judging a single Report and N_O equals the number of occasions on which a single Report is judged. This formula simplifies to the first where each Program Operations Report is judged by one rater on a single occasion since N_R and N_O both equal one and the variance estimates calculated in the G study remain unchanged.

In a similar manner, it is possible to specify a level of stability, i.e., a desirable generalizability coefficient and solve for either the number of raters or occassions needed to obtain such reliability. However, for a VCIP Program Operations Report it would appear that the most cost efficient approach, given the relatively large between-raters variance components, would be to determine the number of individuals necessary to produce a reliable judgement on each item. In order to do so, it is only necessary to take the above formula, specify a G coefficient, and solve for N_R (the number of raters). For example, taking .80 as the minimum acceptable level of stability we have:

$$N_R = \frac{\hat{\sigma}^2_{PR} + \hat{\sigma}^2_{PRO,e}}{.25\hat{\sigma}^2_{P} - \hat{\sigma}^2_{PO}} \; .$$

In the present case, this formula was applied to each variable of interest after eliminating all items that had produced G coefficients of zero or near zero or an indeterminable number of raters resulting from true score variance estimates of almost zero. Entries of such low reliability would require a prohibitively large or indeterminant number of raters to reach the desired level of stability. Table G.6 provides the number of raters needed to obtain a .80 reliability for each item and the associated G coefficient.

The results indicate that seven individuals, on a single occassion, was the average number of raters needed to produce judgements of .80 reliability for the reduced subset of 144 items (i.e., after elimination of items with G coefficients of zero or near zero and items with an indeterminable number of raters). The number of required raters ranged from a low of one to a high of 62 (items that require high numbers of raters had produced very low initial G coefficients and may also be eliminated by the practitioner as being of little value given their instability). However, the mode was between one and two raters which together with the mean and range indicates a possitively skewed non-symmetic distribution. Therefore, it would appear that the median is the more representative number necessary to obtain a G of .80 than the arithmetic mean. The median required number of raters to obtain a .80 reliability was four individuals.

Table G.5

Univariate Variance Component Estimates for All Variables

Variable[a]	$\hat{\sigma}^2_P$	$\hat{\sigma}^2_{PO}$	$\hat{\sigma}^2_{PR}$	$\hat{\sigma}^2_{PRO,e}$	$\hat{\xi}^2_\rho$
AV1	0.09257	-0,00512	0,011995	0,0790	0.496171
AV2	0.13059	-0,00809	0,024650	0,0718	0.575082
AV3	0.00903	0,00724	0,004520	0,0745	0.092814
AV4	0.06583	-0,01669	0,024814	0,1590	0.285582
AV5	0.09496	0,00143	0,001431	0,1324	0.424957
AV6	0.03695	-0,00575	0,052950	0,0938	0.201119
AV7	0.13590	0,01211	0,032013	0,0581	0.567201
AV8	0.11022	-0,01068	0,084459	0,0854	0.449741
AV9	0.11140	-0,00453	0,001422	0,0731	0.599300
AV10	0.09950	-0,00150	0,013602	0,1232	0.415931
AV11	0.05501	-0,01098	0,022577	0,0741	0.362651
AV12	0.08729	-0,00166	0,006732	0,0452	0.626762
AV13	0.16605	0,00575	0,000612	0,0271	0.832300
AV14	0.05661	0,01273	0,023408	0,0866	0.413720
AV15	0.03469	-0,01233	0,024410	0,0887	0.234729
AV16	0.13772	0,00207	0,031426	0,0759	0.557311
AV17	0.02647	-0,15435	0,143482	0,9499	0.734607
AV18	0.13342	-0,01233	-0,000017	0,0768	0.630670
AV19	0.12253	-0,01702	0,011310	0,1344	0.456772
AV20	0.13895	0,01192	0,056052	0,0365	0.570830
AV21	0.05748	-0,00412	0,039591	0,0764	0.332137
AV22	0.02210	-0,00020	0,011916	0,0712	0.210522
AV23	0.02012	-0,00002	0,010652	0,0296	0.333297
AV24	0.05132	-0,00864	0,060322	0,0842	0.262052
AV25	0.05439	0,01171	0,033060	0,0831	0.298417
AV26	0.03941	-0,00730	0,055008	0,1055	0.197125
AV27	0.13075	0,00594	0,004696	0,0528	0.673345
AV28	0.09783	-0,00411	0,093796	0,0895	0.206930
AV29	0.02565	0,00298	0,024364	0,1182	0.145670
AV30	0.12336	0,00103	0,017861	0,0979	0.513673
AV31	0.01682	0,00658	0,023829	0,0874	0.124968
AV32	0.09278	-0,01191	0,022981	0,1010	0.428021
AV33	0.07123	0,00142	0,033562	0,1312	0.303866
AV34	0.02320	0,01969	0,019477	0,0764	0.167195
AV35	0.02546	0,00778	0,021323	0,1076	0.156992
V110	0.19089	-0,00083	-0,000435	0,0811	0.822841
V111	0.10304	-0,00617	0,002856	0,0534	0.646853
V112	0.00000	0,00000	0,011495	0,0000	0.000000
V113	0.07142	-0,00923	0,034421	0,0712	0.392346
V114	-0.00001	0,00002	0,000025	0,0057	0.000000
V115	0.01026	-0,00019	0,000023	0,0330	0.236962
V116	0.02831	0,00557	0,023856	0,0231	0.350201
V118	0.00000	0,00554	-0,000006	0,0113	0.000124
V119	0.13903	-0,00348	0,025674	0,0638	0.594667
V120	-0.00061	0,00092	-0,000421	0,0168	0.000000
V121	0.00472	-0,00574	-0,005527	0,0402	0.104986
V123	0.12234	-0,01171	0,008801	0,0766	0.584471
V124	0.01252	0,01354	0,005941	0,0460	0.160559
V125	-0.00000	0,00001	-0,002038	0,0324	0.000000
V128	0.07142	-0,00594	0,017255	0,0831	0.415789
V129	0.03017	-0,01396	0,002663	0,0895	0.246646
V130	0.05767	0,00103	0,004246	0,1336	0.286148
V131	0.07387	-0,00491	0,001252	0,0562	0.561190

(continued)

Table G.5 (continued)

Univariate Variance Component Estimates for All Variables

Variable[a]	$\hat{\sigma}^2_P$	$\hat{\sigma}^2_{PO}$	$\hat{\sigma}^2_{PR}$	$\hat{\sigma}^2_{PRO,e}$	$\hat{\xi}^2_\rho$
V134	0.005344	-0.000014	-0.006590	0.0296	0.15292
V135	0.011084	0.000000	0.022578	0.0000	0.32927
V136	0.036743	-0.000005	0.006357	0.0230	0.55587
V137	-0.000008	0.000015	0.000023	0.0057	0.00000
V138	0.000000	0.000000	0.011495	0.0000	0.00000
V139	-0.000008	0.000015	0.000023	0.0057	0.00000
V140	-0.000005	0.000010	0.015264	0.0324	0.00000
V141	0.005740	0.000015	0.005771	0.0057	0.33320
V142	0.002265	0.000601	0.009213	0.0569	0.03284
V143	0.005740	0.000015	0.005771	0.0057	0.33320
V144	0.000004	-0.000625	-0.000013	0.0224	0.00020
V147	-0.000205	-0.000206	0.011288	0.0117	0.00000
V148	0.192925	-0.028296	-0.016378	0.1087	0.63962
V149	0.221258	0.000218	0.000429	0.0170	0.92619
V150	0.059311	0.006173	0.051131	0.0291	0.40703
V151	0.167274	-0.004499	0.014188	0.0722	0.65944
V152	0.205260	-0.017663	-0.006586	0.0768	0.72772
V153	0.005534	0.000015	0.016649	0.0057	0.19837
V154	0.086406	0.001039	0.012129	0.0913	0.45268
V155	0.022981	0.000015	0.000023	0.0057	0.80018
V156	0.000000	0.004310	-0.000001	0.0273	0.00001
V157	-0.000001	0.000006	0.011495	0.0000	0.00000
V158	0.094002	0.001035	0.048862	0.0556	0.47119
V159	0.010680	-0.001656	0.009830	0.0296	0.21314
V160	0.042890	-0.005732	-0.000593	0.0291	0.59578
V161	0.004512	0.005344	0.005349	0.0283	0.10372
V162	0.112472	-0.000395	0.016033	0.0291	0.71363
V163	0.143684	-0.006990	0.006551	0.0612	0.67957
V164	0.000000	0.000000	0.011495	0.0000	0.00000
V165	0.042649	0.014356	0.084958	0.0846	0.18842
V168	0.098112	0.000206	-0.005746	0.0470	0.67515
V169	-0.000619	0.000418	0.011299	0.0164	0.00000
V172	0.003900	0.000205	0.005541	0.0351	0.08716
V173	-0.000411	0.000001	0.011496	0.0119	0.00000
V174	0.123[illegible]67	0.003914	-0.003263	0.0954	0.55520
V175	0.004311	0.006154	0.005946	0.0230	0.10942
V180	0.003908	0.005731	0.017833	0.0177	0.08651
V181	0.005542	-0.000206	0.005952	0.0117	0.23895
V183	0.000003	-0.000006	-0.000008	0.0111	0.00024
V184	0.011282	0.000015	0.011312	0.0057	0.39851
V186	-0.000008	0.000015	0.000023	0.0057	0.00000
V187	-0.000008	0.000015	0.000023	0.0057	0.00000
V188	0.031621	-0.011918	-0.000635	0.0415	0.43400
V189	-0.000008	0.000015	0.000023	0.0057	0.00000
V191	0.525250	0.003071	0.155777	0.5577	0.42298
V194	0.123158	-0.016020	-0.016026	0.1433	0.46220
V195	0.189648	0.005762	0.000023	0.0057	0.94290
V196	0.171565	0.005763	0.000023	0.0057	0.93726
V197	0.147365	0.000015	0.005771	0.0057	0.92769
V198	0.092151	-0.000395	0.005565	0.0291	0.72665
V199	0.034483	0.000000	0.000000	0.0000	1.00000
V200	0.154534	-0.001021	-0.012103	0.0474	0.76524
V201	0.034065	0.000015	0.000023	0.0057	0.85582

Table G.5 (continued)

Univariate Variance Component Estimates for All Variables

Variable[a]	$\hat{\sigma}^2_P$	$\hat{\sigma}^2_{PO}$	$\hat{\sigma}^2_{PR}$	$\hat{\sigma}^2_{PRO,e}$	$\hat{\xi}^2_\rho$
V203	0,05337	0,00019	-0,000022	0,0687	0,451316
V204	0,00001	-0,00002	-0,000845	0,0177	0,000437
V205	0,00000	-0,00021	0,000000	0,0117	0,000000
V206	0,01048	-0,00002	0,011265	0,0177	0,265609
V207	0,03202	-0,01272	0,026692	0,0944	0,209109
V208	0,11055	-0,01703	0,029479	0,0790	0,512414
V209	0,02258	0,01210	0,025437	0,0224	0,273659
V210	0,00986	-0,01192	-0,002070	0,0534	0,155835
V211	0,02216	0,00042	0,000010	0,0164	0,568429
V212	-0,00000	0,00000	0,000005	0,0160	0,000000
V213	-0,00001	0,00002	0,000023	0,0057	0,000000
V224	0,01089	-0,00002	0,010033	0,0177	0,281893
V225	0,06321	0,01807	0,016025	0,0402	0,459676
V226	0,11220	0,01826	0,029755	0,0581	0,514099
V227	0,04120	0,00020	0,010875	0,0232	0,546194
V228	0,06179	0,00657	0,002872	0,0390	0,561339
V229	0,15312	-0,00719	-0,002880	0,0770	0,665399
V230	0,05322	-0,00021	0,010673	0,0117	0,738605
V231	0,12664	-0,00226	0,014164	0,0470	0,674322
V232	0,08888	-0,00555	0,003064	0,0770	0,526090
V233	0.11474	0,00001	0,000014	0,0636	0,643688
V234	-0,00001	0,00002	0,000023	0,0057	0,000000
V236	0,10284	0,07532	0,099715	0,2802	0,184604
V238	3.34594	-0,12686	0,136893	0,9249	0,759057
V242	1.81199	-0,03327	-0,003304	0,3227	0,848851
V246	0,09311	0,01108	0,000403	0,0111	0,656229
V247	0,04433	0,00376	0,000023	0,0057	0,794203
V248	0,01723	-0,00573	-0,005727	0,0172	0,500501
V249	-0,00001	0,00002	0,000023	0,0057	0,000000
V250	0,03880	0,01250	0,041642	0,0450	0,281278
V251	0,02114	-0,00636	0,026890	0,0470	0,222462
V252	0,14101	-0,00596	0,037554	0,0815	0,542216
V253	0.19715	-0,01069	0,007777	0,1076	0,481516
V256	0,07944	0,00081	-0,002270	0,0460	0,629205
V257	0,02156	-0,00555	-0,001448	0,0343	0,385914
V258	0,09791	-0,00575	-0,005547	0,0230	0,809774
V259	0,01501	0,00020	0,015825	0,0113	0,361132
V260	0,02607	-0,00001	0,004699	0,0296	0,431882
V261	0,02565	-0,00020	0,005338	0,0236	0,479720
V262	0,04721	-0,00021	0,017241	0,0117	0,619947
V263	0,01539	-0,00040	0,017878	0,0172	0,304909
V264	0,05495	0,00576	0,000023	0,0057	0,849535
V265	0,00000	0,00554	-0,000005	0,0113	0,000106
V266	-0,00001	0,00002	0,011197	0,0057	0,000000
V267	0,00000	-0,00001	-0,000008	0,0111	0,000241
V270	0,01007	-0,00002	0,021117	0,0177	0,205907
V271	-0,00001	-0,00040	0,000021	0,0172	0,000000
V272	0,00993	0,02155	0,021391	0,0113	0,142883
V273	-0,00021	0,00534	0,010479	0,0164	0,000000
V274	0,00553	0,00002	0,014649	0,0057	0,198368
V275	-0,00001	0,00002	0,011107	0,0057	0,000000
V276	0,04425	0,00002	0,004238	0,0057	0,471887
V277	0,01581	-0,00021	0,020047	0,0117	0,295024

Table G.5 (continued)

Univariate Variance Component Estimates for All Variables

Variable[a]	$\hat{\sigma}^2_P$	$\hat{\sigma}^2_{PO}$	$\hat{\sigma}^2_{PR}$	$\hat{\sigma}^2_{PRO,e}$	$\hat{\xi}^2_\rho$
V278	0,02012	-0,000014	0,010652	0,0296	0,333291
V279	0,02012	-0,000014	0,010652	0,0296	0,333291
V282	-0,00000	0,000001	-0,000408	0,0119	0,000000
V284	-0,00041	0,000004	-0,000405	0,0238	0,000000
V285	-0,00001	0,000015	0,011107	0,0057	0,000000
V287	1,59504	-0,011094	0,024000	0,0731	0,942617
V290	-0,00001	0,000015	0,000023	0,0057	0,000000
V291	0,10366	-0,013350	0,010455	0,1123	0,457826
V292	0,16319	0,000805	0,018654	0,0333	0,755685
V293	-0,00124	0,000218	0,022596	0,0170	0,000000
V294	0,03962	-0,000418	0,060949	0,0616	0,244301
V295	0,00512	0,000219	-0,005932	0,0289	0,149646
V297	0,19520	-0,001852	-0,001855	0,1517	0,562697
V300	0,03140	0,017451	0,043726	0,0708	0,192201
V301	0,04701	0,000610	0,046994	0,0696	0,286258
V302	0,05070	0,017655	0,104889	0,0628	0,214779
V303	0,01212	-0,000014	0,041235	0,0296	0,146072
V304	0,01581	-0,006169	0,030977	0,0534	0,157806
V305	0,00348	-0,000395	0,038816	0,0291	0,048763
V306	-0,00001	0,000015	0,000023	0,0057	0,000000
V307	0,02463	-0,007801	0,028323	0,0936	0,168071
V308	-0,00001	0,000015	0,000023	0,0057	0,000000
V310	0,03408	0,011477	0,020090	0,0411	0,319262
V311	0,00493	-0,005962	-0,006993	0,0458	0,097198
V312	0,09421	0,000206	0,065067	0,0470	0,456265
V313	0,09832	0,006758	0,049854	0,0569	0,464152
V314	0,05726	0,000008	0,028543	0,0517	0,416411
V315	0,12213	-0,005549	-0,000627	0,0343	0,700732
V316	0,03961	-0,005330	0,062318	0,0985	0,179699
V317	0,00697	0,007607	0,007819	0,0757	0,071075
V319	0,00492	0,000005	0,004933	0,0279	0,130399
V320	0,02340	0,000205	0,016830	0,0351	0,309784
V321	0,00904	-0,006987	0,000809	0,0772	0,103799
V322	0,03910	0,009844	0,013829	0,0616	0,314804
V323	0,11103	0,000427	0,023218	0,0878	0,499077
V324	0,02505	-0,025056	-0,030401	0,0998	0,200631
V325	-0,00001	0,000015	0,000023	0,0057	0,000000
V326	0,05399	-0,015813	0,041244	0,0889	0,293195
V327	0,14962	-0,004710	0,024031	0,0794	0,591271
V328	0,01682	0,006581	0,023829	0,0874	0,124964
V332	0,10488	-0,017646	0,013350	0,0944	0,493256
V333	0,01048	0,005538	0,011488	0,0113	0,273713
V334	0,00554	-0,005733	0,005562	0,0172	0,195604
V336	0,09170	-0,018087	0,028714	0,1195	0,355345
V337	0,00595	0,002668	0,036739	0,0507	0,061966
V338	0,02093	0,000419	0,008222	0,0283	0,361685
V339	-0,00042	0,010682	-0,001217	0,0283	0,000000
V340	0,01273	0,001835	-0,004946	0,0532	0,187879
V342	0,00260	0,011910	-0,002654	0,0402	0,048627
V343	0,02257	0,018874	0,014575	0,0509	0,210420
V344	-0,00082	0,000418	0,011915	0,0164	0,000000
V345	0,00000	-0,000006	0,010665	0,0111	0,000123
V346	-0,00001	0,000015	0,000023	0,0057	0,000000

Table G.5 (continued)

Univariate Variance Component Estimates for All Variables

Variable[a]	$\hat{\sigma}^2_P$	$\hat{\sigma}^2_{PO}$	$\hat{\sigma}^2_{PR}$	$\hat{\sigma}^2_{PRO,e}$	$\hat{\xi}^2_\rho$
V347	0.0334506	0.012327	0.0273161	0.0521	0.267190
V348	0.0170414	-0.001858	0.0334402	0.0339	0.201956
V349	-0.0012283	0.011282	0.0012205	0.0265	0.000000
V350	0.0174423	-0.011896	0.0207429	0.0517	0.194051
V351	0.0000000	-0.000206	0.0000000	0.0117	0.000000
V352	-0.0004027	-0.000015	0.0106491	0.0177	0.000000
V353	-0.0000077	0.000015	0.0000232	0.0057	0.000000

[a] Variables with zero variance are undefined and are not included in the list of univariate G's.

Table G.6

Number of Raters Required for .80 Reliability and Univariate G Coefficient Estimates

Variable[a]	Number of Raters	$\hat{\xi}^{22}_{\rho}$
AV1	3.3254	0.496171
AV2	2.6262	0.575082
AV4	4.9625	0.285582
AV5	5.6812	0.424957
AV6	9.6621	0.201119
AV7	4.1606	0.569201
AV8	3.5273	0.449741
AV9	2.3008	0.599300
AV10	5.2661	0.415931
AV11	3.9248	0.362651
AV12	2.2138	0.626762
AV13	1.0000	0.832300
AV14	12.3309	0.413720
AV15	5.3863	0.234729
AV16	3.3164	0.557311
AV17	1.2002	0.734607
AV18	1.6808	0.634670
AV19	3.0577	0.456792
AV20	4.0555	0.570830
AV21	6.2558	0.332137
AV22	14.4838	0.210522
AV23	7.9768	0.333297
AV24	6.7326	0.262052
AV25	61.5004	0.298417
AV26	9.0934	0.197125
AV27	2.1492	0.673345
AV28	11.4098	0.206930
AV29	41.7916	0.145670
AV30	3.8832	0.513673
AV32	3.5318	0.428021
AV33	9.8725	0.303866
V110	1.0000	0.822841
V111	1.7619	0.646853
V113	4.0842	0.392346
V115	11.9896	0.236962
V116	31.2036	0.350201
V119	2.4193	0.599667
V121	5.0136	0.104986
V123	2.0143	0.589471
V128	4.2168	0.415789
V129	4.2858	0.246646

Table G.6 (continued)

Variable[a]	Number of Raters	$\hat{\xi}^2_\rho$
V130	10.6722	0.286144
V131	2.4677	0.561190
V134	17.0415	0.15292
V135	8.1481	0.32927
V136	3.1943	0.55587
V141	8.0811	0.33320
V143	8.0811	0.33320
V148	1.2064	0.63962
V149	1.0000	0.92614
V150	9.2698	0.40703
V151	1.8651	0.65944
V152	1.0179	0.72772
V153	16.3361	0.19837
V154	5.0301	0.45268
V155	1.0000	0.80018
V158	4.6498	0.47119
V159	9.1147	0.21314
V160	1.7325	0.59578
V162	1.5829	0.71363
V163	1.5789	0.67957
V168	1.6962	0.67515
V172	52.7643	0.08716
V174	3.4027	0.55520
V181	11.0912	0.23895
V184	6.0653	0.39851
V188	2.0563	0.43400
V191	5.5636	0.42298
V194	2.7190	0.46220
V195	1.0000	0.94290
V196	1.0000	0.93726
V197	1.0000	0.92769
V198	1.4793	0.72665
V199	1.0000	1.00000
V200	1.0000	0.76529
V201	1.0000	0.85582
V203	4.9169	0.451316
V206	10.9948	0.265609
V207	5.8430	0.209109
V208	2.3867	0.512414
V210	3.5696	0.155835
V211	3.2031	0.568429
V224	10.1322	0.281893
V226	8.9593	0.514099
V227	3.3702	0.546194

Table G.6 (continued)

Variable[a]	Number of Raters	$\hat{\xi}_\rho^2$
V228	4.6895	0.561339
V229	1.6297	0.665399
V230	1.3974	0.738605
V231	1.8033	0.674322
V232	2.8830	0.526090
V233	2.2146	0.643688
V238	1.1025	0.759057
V242	1.0000	0.848831
V247	1.0760	0.794203
V248	1.1425	0.500501
V251	6.3441	0.222462
V252	2.8890	0.642216
V253	3.0786	0.481516
V256	2.2960	0.629205
V257	3.0036	0.385914
V258	1.0000	0.809774
V259	7.3978	0.361132
V260	5.2503	0.431882
V261	4.2097	0.479720
V262	2.4101	0.619947
V263	8.2667	0.304909
V264	1.0000	0.849535
V270	15.3319	0.205907
V274	16.3361	0.198368
V276	4.4811	0.471887
V277	9.0847	0.295024
V278	7.9789	0.333291
V279	7.9789	0.333291
V287	1.0000	0.942617
V291	3.1264	0.457826
V292	1.2991	0.755685
V294	11.8723	0.244301
V295	21.6259	0.149646
V297	2.9583	0.562697
V301	10.4643	0.286258
V303	23.2739	0.146072
V304	8.3363	0.157806
V305	53.6621	0.048763
V307	8.7343	0.168071
V311	5.3939	0.097198
V312	4.8001	0.456265
V313	5.9898	0.464152
V314	5.6086	0.416411
V315	1.0000	0.780732

Table G.6 (continued)

Variable[a]	Number of Raters	$\hat{\xi}^2_\rho$
V316	11.8706	0.179699
V319	26.7748	0.130399
V320	9.1992	0.309784
V321	8.4373	0.103799
V323	4.0619	0.499077
V324	2.2159	0.200631
V326	4.4403	0.293195
V327	2.4559	0.591271
V332	2.4563	0.493256
V334	3.1983	0.195604
V336	3.8090	0.355345
V338	7.5868	0.361685
V340	35.7855	0.187879
V348	11.0057	0.201956
V350	4.4561	0.194051

[a] Those variables with G coefficients less than .001 or an indeterminable number of raters resulting from true score variance estimates of almost zero are not included in the list of univariate G's and required number of raters.

Table G.7

Sums of Squares and Cross Products Due to Various Sources for 5 Easy Categories

	Due to Program				
	Educational level of coordinator	Flyers and letters	Combination of media and special events	Publication, pamphlets, and gimmicks	Direct contact with schools and agencies
Educational level of coordinator	270.425				
Flyers and letters	10.569	14.88			
Combination of media and special events	23.316	11.362	20.701		
Publications, pamphlets, and gimmicks	12.845	5.925	10.477	27.126	
Direct contact with schools and agencies	-19.672	.621	-.988	-.063	22.782

	Due to Program by Occasion Interaction				
	Educational level of coordinator	Flyers and letters	Combination of media and special events	Publication, pamphlets, and gimmicks	Direct contact with schools and agencies
Educational level of coordinator	1.115				
Flyers and letters	.017	2.494			
Combination of media and special events	.316	.006	3.828		
Publications, pamphlets, and gimmicks	.201	-.845	.178	2.644	
Direct contact with schools and agencies	-.316	.167	-.161	.155	1.494

(continued)

Table G.7 (continued)

Sums of Squares and Cross Products Due to Various Sources for 5 Easy Categories

	Due to Program by Rater Interaction				
	Educational level of coordinator	Flyers and letters	Combination of media and special events	Publication, pamphlets, and gimmicks	Direct contact with schools and agencies
Educational level of coordinator	6.782				
Flyers and letters	-.138	10.563			
Combination of media and special events	-.799	-2.172	7.575		
Publications, pamphlets, and gimmicks	-.914	-.805	-.856	6.839	
Direct contact with schools and agencies	-.672	-1.017	1.506	-.075	10.322

	Due to Program by Occasion by Rater Interaction (Error)				
	Educational level of coordinator	Flyers and letters	Combination of media and special events	Publication, pamphlets, and gimmicks	Direct contact with schools and agencies
Educational level of coordinator	4.092				
Flyers and letters	-.207	7.782			
Combination of media and special events	.615	-1.747	7.426		
Publications, pamphlets, and gimmicks	-.305	.207	.063	3.253	
Direct contact with schools and agencies	.523	.442	-.356	-.569	4.782

Table G.8

Estimated Variance-Covariance Components for 5 Easy Categories

Estimated Observed Variance-Covariance Matrix

	Educational level of coordinator	Flyers and letters	Combination of media and special events	Publication, pamphlets, and gimmicks	Direct contact with schools and agencies
Educational level of coordinator	1.681				
Flyers and letters	.061	.213			
Combination of media and special events	.140	.044	.235		
Publications, pamphlets, and gimmicks	.070	.027	.059	.237	
Direct contact with schools and agencies	-.120	.001	.0000000	-.003	.234

Estimated "True" Variance-Covariance Matrix

	Educational level of coordinator	Flyers and letters	Combination of media and special events	Publication, pamphlets, and gimmicks	Direct contact with schools and agencies
Educational level of coordinator	1.595				
Flyers and letters	.063	.065			
Combination of media and special events	.141	.069	.100		
Publications, pamphlets, and gimmicks	.077	.043	.064	.135	
Direct contact with schools and agencies	-.112	.007	-.010	-.003	.110

Table G.9

Sums of Squares and Cross Products Due to Various Sources for 5 Hard Categories

	Due to Program				
	OVA office and staff	Qualities of OVA	Coordination of counseling services	Number of veterans receiving services or referred	General supervision responsibilities
OVA office and staff	18.701				
Qualities of OVA	-7.069	17.471			
Coordination of counseling services	4.397	-2.126	36.977		
Number of veterans receiving services or referred	-24.155	24.810	38.632	530.115	
General supervision responsibilities	-1.891	-3.718	-3.994	-4.575	24.207

	Due to Program by Occasion Interaction				
	OVA office and staff	Qualities of OVA	Coordination of counseling services	Number of veterans receiving services or referred	General supervision responsibilities
OVA office and staff	1.828				
Qualities of OVA	-.034	3.793			
Coordination of counseling services	-.431	.414	14.172		
Number of veterans receiving services or referred	.213	-1.224	.448	13.632	
General supervision responsibilities	.155	.098	-.029	-1.241	-1.977

(continued)

Table G.9 (continued)

Sums of Squares and Cross Products Due to Various Sources for 5 Hard Categories

	Due to Program by Rater Interaction				
	OVA office and staff	Qualities of OVA	Coordination of counseling services	Number of veterans receiving services or referred	General supervision responsibilities
OVA office and staff	8.230				
Qualities of OVA	-2.724	10.770			
Coordination of counseling services	2.948	-.184	26.747		
Number of veterans receiving services or referred	-4.172	3.776	-.787	69.264	
General supervision responsibilities	.115	-1.385	-1.988	.316	3.483

	Due to Program by Occasion by Rater Interaction (Error)				
	OVA office and staff	Qualities of OVA	Coordination of counseling services	Number of veterans receiving services or referred	General supervision responsibilities
OVA office and staff	5.655				
Qualities of OVA	-.965	7.345			
Coordination of counseling services	.121	.379	15.690		
Number of veterans receiving services or referred	.149	4.362	3.983	53.195	
General supervision responsibilities	-.655	-.339	-.644	1.845	2.954

Table G.10

Estimated Variance-Covariance Components for 5 Hard Categories

	Estimated Observed Variance-Covariance Matrix				
	OVA office and staff	Qualities of OVA	Coordination of counseling services	Number of veterans receiving services or referred	General supervision responsibilities
OVA office and staff	.205				
Qualities of OVA	-.064	.234			
Coordination of counseling services	.042	-.009	.557		
Number of veterans receiving services or referred	-.166	.189	.252	3.965	
General supervision responsibilities	-.013	-.032	-.040	-.022	.194

	Estimated "True" Variance-Covariance Matrix				
	OVA office and staff	Qualities of OVA	Coordination of counseling services	Number of veterans receiving services or referred	General supervision responsibilities
OVA office and staff	.093				
Qualities of OVA	-.037	.071			
Coordination of counseling services	.020	-.613	.103		
Number of veterans receiving services or referred	-.136	-.157	.241	3.026	
General supervision responsibilities	-.014	-.020	-.020	-.015	.131

Table G.11

Sums of Squares and Cross Products Due to Various Sources for 10 Easy Indicator Items

	Due to Program									
	Flyers	Letters	Institution's recruitment materials	Distribution of pamphlets	Contact with other agencies	Pens, stickers, gimmicks	Contacts in minority communities	Presentations at schools	Visit agencies	Telephone contact
Flyers	14.793									
Letters	-.592	6.552								
Institution's recruitment materials	6.299	1.540	14.161							
Distribution of pamphlets	6.017	-.937	5.753	30.540						
Contact with other agencies	3.580	-1.149	3.402	.465	17.839					
Pens, stickers, gimmicks	-.172	-.632	-.862	2.931	-1.322	4.023				
Contacts in minority communities	.931	.747	1.322	-.828	.471	-.057	.644			
Presentations at schools	.856	-.638	-1.218	-2.724	-1.379	-.259	-.103	3.034		
Visit agencies	-.276	-.678	-1.379	-3.144	-.615	-.230	-.092	1.586	2.299	
Telephone contact	1.362	1.828	-2.856	-3.845	-2.391	-.115	-.045	1.293	-.517	20.575

(continued)

Table G.11 (continued)

Sums of Squares and Cross Products Due to Various Sources for 10 Easy Indicator Items

	Due to Program by Occasion Interaction									
	Flyers	Letters	Institution's recruitment materials	Distribution of pamphlets	Contact with other agencies	Pens, stickers, gimmicks	Contacts in minority communities	Presentations at schools	Visit agencies	Telephone contact
Flyers	1.828									
Letters	.500	1.333								
Institution's recruitment materials	-.333	0	1.333							
Distribution of pamphlets	-.178	.167	-.167	1.644						
Contact with other agencies	.488	-.333	0	-.190	2.644					
Pens, stickers, gimmicks	-.161	0	0	.011	.011	.161				
Contacts in minority communities	0	0	0	0	0	0	0			
Presentations at schools	-.362	.167	.333	-.057	-.057	.029	0	.690		
Visit agencies	.023	-.333	0	.213	-.121	-.023	0	-.218	1.241	
Telephone contact	-.316	.333	.167	-.132	-.299	.149	0	.086	-.069	.782

(continued)

Table G.11 (continued)

Sums of Squares and Cross Products Due to Various Sources for 10 Easy Indicator Items

	Due to Program by Rater Interaction									
	Flyers	Letters	Institution's recruitment materials	Distribution of pamphlets	Contact with other agencies	Pens, stickers, gimmicks	Contacts in minority communities	Presentations at schools	Visit agencies	Telephone contact
Flyers	6.586									
Letters	.316	5.310								
Institution's recruitment materials	-2.178	1.908	7.356							
Distribution of pamphlets	.966	-.563	-1.115	5.632						
Contact with other agencies	-1.511	-1.402	.098	.027	6.471					
Pens, stickers, gimmicks	-.362	.063	.052	-.017	.132	.322				
Contacts in minority communities	-.276	-.126	.230	.034	.736	.023	1.287			
Presentations at schools	-.753	-.448	.374	.517	.155	-.017	.034	2.759		
Visit agencies	.121	.351	.052	-.236	-.144	-.029	.057	-.416	2.184	
Telephone contact	-.448	-.724	1.115	-.914	.236	.201	.598	-.121	.190	3.425

(continued)

Table G.11 (continued)

Sums of Squares and Cross Products Due to Various Sources for 10 Easy Indicator Items

	Due to Program by Occasion by Rater Interaction (Error)									
	Flyers	Letters	Institution's recruitment materials	Distribution of pamphlets	Contact with other agencies	Pens, stickers, gimmicks	Contacts in minority communities	Presentations at schools	Visit agencies	Telephone contact
Flyers	4.655									
Letters	1.534	5.011								
Institution's recruitment materials	.351	.517	1.632							
Distribution of pamphlets	.609	.506	.253	4.046						
Contact with other agencies	.546	1.057	-.052	-.103	5.115					
Pens, stickers, gimmicks	-.339	-.052	.017	-.029	.006	.322				
Contacts in minority communities	0	0	0	0	0	0	0			
Presentations at schools	.328	-.080	.167	-.529	.040	.006	0	1.655		
Visit agencies	.477	.040	.017	-.282	.293	.006	0	-.195	1.586	
Telephone contact	.851	.046	-.184	-.247	.247	-.167	0	.017	.052	1.632

Table G.12

Estimated Variance-Covariance Components for 10 Easy Indicator Items

	Estimated Observed Variance-Covariance Matrix									
	Flyers	Letters	Institution's recruitment materials	Distribution of pamphlets	Contact with other agencies	Pens, stickers, gimmicks	Contacts in minority communities	Presentations at schools	Visit agencies	Telephone contact
Flyers	.166									
Letters	.010	.108								
Institution's recruitment materials	.025	.024	.146							
Distribution of pamphlets	.044	-.005	.028	.249						
Contact with other agencies	.018	-.011	.020	.001	.191					
Pens, stickers, gimmicks	-.006	-.004	-.005	.017	-.007	.029				
Contacts in minority communities	.004	.004	.009	-.005	.007	-.001	.011			
Presentations at schools	.001	.002	-.002	-.007	-.007	-.001	-.001	.048		
Visit agencies	.002	-.004	-.008	-.021	-.003	-.002	-.001	.005	.044	
Telephone contact	.009	.009	-.016	.015	-.013	.001	.003	.008	-.002	.157

(continued)

Table G.12 (continued)

Estimated Variance-Covariance Components for 10 Easy Indicator Items

	Estimated "True" Variance-Covariance Matrix									
	Flyers	Letters	Institution's recruitment materials	Distribution of pamphlets	Contact with other agencies	Pens, stickers, gimmicks	Contacts in minority communities	Presentations at schools	Visit agencies	Telephone contact
Flyers	.071									
Letters	-.003	.030								
Institutions' recruitment materials	.047	.005	.059							
Distribution of pamphlets	.036	-.003	.039	.167						
Contact with other agencies	.024	.002	.020	.003	.086					
Pens, stickers, gimmicks	0	-.004	-.005	.017	-.008	.023				
Contacts in minority communities	.006	.005	.007	-.005	.001	-.001	0			
Presentations at schools	.010	.004	-.010	-.008	-.008	-.002	-.001	.011		
Visit agencies	-.001	-.003	-.008	-.020	-.002	-.001	-.001	.011	.004	
Telephone contact	.014	.011	-.018	.026	-.012	-.003	-.002	.008	-.003	.112

Table G.13

Sums of Squares and Cross Products Due to Various Sources for 10 Hard Indicator Items

	Due to Program									
	OVA qualified staff	OVA responsive	OVA personalized service	Cooperation with other agencies	Other relative to outside agencies	Counseling activity	Coordination activity	Total number of veterans receiving services	Recruitment	Job placement, interviews, training
OVA qualified staff	3.218									
OVA responsive	-.425	17.126								
OVA personalized service	.831	2.247	3.506							
Cooperation with other agencies	.466	-1.161	-.011	1.023						
Other relative to outside agencies	0	0	0	0	0					
Counseling activity	-.270	-1.149	-.201	-.431	0	4.540				
Coordination activity	1.080	-2.236	1.638	-.942	0	-1.161	36.978			
Total number of veterans receiving services	17.397	23.851	9.132	-2.931	0	-7.293	33.506	584.874		
Recruitment	-.356	2.448	1.937	.793	0	-1.287	-.851	-26.121	12.529	
Job placement, interviews, training	-.040	-.299	-.069	-.029	0	-.086	.345	2.414	-.241	.161

(continued)

Table G.13 (continued)

Sums of Squares and Cross Products Due to Various Sources for 10 Hard Indicator Items

	Due to Program by Occasion Interaction									
	OVA qualified staff	OVA responsive	OVA personalized service	Cooperation with other agencies	Other relative to outside agencies	Counseling activity	Coordination activity	Total number of veterans receiving services	Recruitment	Job placement, interviews, training
OVA qualified staff	.782									
OVA responsive	.230	1.793								
OVA personalized service	-.632	-.098	1.644							
Cooperation with other agencies	-.017	-.034	.011	.494						
Other relative to outside agencies	0	0	0	0	0					
Counseling activity	-.052	-.437	.201	-.017	0	.448				
Coordination Activity	.207	.580	.029	.736	0	-.126	14.172			
Total number of veterans receiving services	.902	-1.862	.121	.023	0	.902	.724	15.241		
Recruitment	0	0	1.667	0	0	0	1.667	.5	2.000	
Job placement, interviews, training	-.017	-.034	.011	-.006	0	-.017	.069	.023	0	.161

(continued)

Table G.13 (continued)

Sums of Squares and Cross Products Due to Various Sources for 10 Hard Indicator Items

	Due to Program by Rater Interaction									
	OVA qualified staff	OVA responsive	OVA personalized service	Cooperation with other agencies	Other relative to outside agencies	Counseling activity	Coordination activity	Total number of veterans receiving services	Recruitment	Job placement, interviews, training
OVA qualified staff	1.920									
OVA responsive	-.092	9.908								
OVA personalized service	.046	.132	2.425							
Cooperation with other agencies	-.655	-.511	-.385	2.252						
Other relative to outside agencies	0	0	0	0	0					
Counseling activity	-.317	.753	-.471	-.190	0	5.218				
Coordination activity	.988	2.115	1.241	-1.488	0	.609	26.747			
Total number of veterans receiving services	-2.069	3.046	.713	.776	0	3.897	-1.626	67.126		
Recruitment	.236	1.741	-.075	-.190	0	-.713	1.178	3.603	9.161	
Job placement, interviews, training	.023	-.063	.017	-.023	0	-.052	.172	.086	-.190	.322

(continued)

Table G.13 (continued)

Sums of Squares and Cross Products Due to Various Sources for 10 Hard Indicator Items

	Due to Program by Occasion by Rater Interaction (Error)									
	OVA qualified staff	OVA responsive	OVA personalized service	Cooperation with other agencies	Other relative to outside agencies	Counseling activity	Coordination activity	Total number of veterans receiving services	Recruitment	Job placement, interviews, training
OVA qualified staff	.632									
OVA responsive	.115	6.690								
OVA personalized service	.080	.856	2.977							
Cooperation with other agencies	-.034	-.155	-.167	.919						
Other relative to outside agencies	0	0	0	0	0					
Counseling activity	-.052	-.167	.264	-.017	0	2.897				
Coordination Activity	-.276	-.736	-.977	.488	0	.471	15.690			
Total number of veterans receiving services	-.609	6.586	2.310	-.109	0	2.253	4.293	51.793		
Recruitment	-.052	.500	-.236	-.017	0	-.103	-2.029	.086	3.897	
Job placement, interviews, training	0	.052	.040	.023	0	-.017	.034	.167	-.017	.322

Table G.14

Estimated Variance-Covariance Components for 10 Hard Indicator Items

	Estimated Observed Variance-Covariance Matrix									
	OVA qualified staff	OVA responsive	OVA personalized service	Cooperation with other agencies	Other relative to outside agencies	Counseling activity	Coordination activity	Total number of veterans receiving services	Recruitment	Job placement, interviews, training
OVA qualified staff	.039									
OVA responsive	-.001	.211								
OVA personalized service	.002	.019	.063							
Cooperation with other agencies	-.001	-.011	-.003	.028						
Other relative to outside agencies	0	0	0	0	0					
Counseling activity	-.004	-.006	-.001	-.004	0	.078				
Coordination activity	.012	-.002	.011	-.007	0	-.001	.557			
Total number of veterans receiving services	.093	.188	.073	-.013	0	-.001	.220	4.280		
Recruitment	-.001	.028	.020	.003	0	-.012	-.001	-.131	.164	
Job placement, interviews, training	-.000	-.002	0	-.001	0	-.001	.004	.016	-.003	.006

(continued)

Table G.14 (continued)

Estimated Variance-Covariance Components for 10 Hard Indicator Items

	Estimated "True" Variance-Covariance Matrix									
	OVA qualified staff	OVA responsive	OVA personalized service	Cooperation with other agencies	Other relative to outside agencies	Counseling activity	Coordination activity	Total number of veterans receiving services	Recruitment	Job placement, interviews, training
OVA qualified staff	.011									
OVA responsive	-.003	.082								
OVA personalized service	.009	.016	.013							
Cooperation with other agencies	.005	-.006	.001	-.001						
Other relative to outside agencies	0	0	0	0	0					
Counseling activity	-.001	-.007	-.001	-.002	0	.017				
Coordination activity	.001	-.025	.003	-.004	0	-.007	.103			
Total number of veterans receiving services	.103	.164	.058	-.020	0	-.054	.213	3.345		
Recruitment	-.003	.011	.001	.005	0	-.006	-.025	-.169	.047	
Job placement, interviews, training	-.001	-.001	-.001	0	0	-.001	.001	.014	-.001	0

Appendix H

Findings and Results

Appendix H

Findings and Results

This appendix provides tabular summaries of the various analytic efforts related to clustering of institutions and subsequent examinations of cluster differences and similarities.

Tables H.1 through H.9 provide percentages by cluster and results of Chi Square tests of significance for the 134 variables listed in Appendix A.

Standardized factors means for selected factor scores together with standard errors and other relevant statistics are in Table H.10.

Means, standard errors and related statistics for selected variables are provided for the total group of 390 institutions forming the 12 clusters in Tables H.11 and H.12. Means, standard errors and relevant statistics within each of the 12 clusters for these same variables are provided in Table H.13.

Tables H.14 through H.19 present the cluster means for enrollment patterns, expenditure patterns, and staffing patterns. Tables H.20 through H.22 provide the associated multivariate analysis of variance tables for the tests of pattern parallelism, flatness, and level.

Tables H.23 through H.26 provide the results of an inspection of institutional compliance with OVA basic requirements.

Table H.1
Percentage of Institutional Characteristics by Cluster

	CLUSTER														
INSTITUTIONAL CHARACTERISTICS[a]	A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value
Highest Offering														31.63	.084
University	25.0[b]	30.4	18.6	25.6	66.7	26.3	22.2	33.3	22.2	23.8	22.2	7.7	25.4		
4 Year College	8.9	13.0	15.7	11.6	0.0	2.6	33.3	13.3	14.3	9.5	11.1	0.0	11.3		
2 Year College	66.1	56.5	65.7	62.8	33.3	71.1	44.4	53.3	63.5	66.7	66.7	92.3	63.3		
Institution Type														24.82	.009
Public	83.9	91.3	87.1	74.4	100.0	94.7	77.8	96.7	74.6	76.2	100.0	100.0	85.4		
Private	16.1	8.7	12.9	25.6	0.0	5.3	22.2	3.3	25.4	23.8	0.0	0.0	14.6		
Total VCIP Funds														205.24	.000
Less than 10,000	44.6	43.5	40.0	27.9	0.0	10.5	0.0	30.0	42.9	71.4	0.0	0.0	33.3		
10,001-20,000	30.4	30.4	22.9	23.3	20.0	28.9	0.0	40.0	36.5	23.8	0.0	0.0	26.7		
20,001-40,000	25.0	26.1	24.3	27.9	40.0	34.2	11.1	20.0	15.9	4.8	0.0	0.0	22.1		
More than 40,000	0.0	0.0	12.9	20.9	40.0	26.3	88.9	10.0	4.8	0.0	100.0	100.0	17.9		
Total Non-VCIP Funds														55.38	.116
0	16.1	21.7	30.0	32.6	26.7	26.3	44.4	23.3	17.5	19.0	55.6	53.8	25.9		
.01-5,000	30.4	43.5	31.4	34.9	13.3	23.7	22.2	36.7	31.7	33.3	0.0	7.7	29.7		
5,001-10,000	19.6	13.0	20.0	9.3	0.0	15.8	0.0	13.3	23.8	14.3	11.1	7.7	15.9		
10,001-20,000	17.9	8.7	10.0	7.0	13.3	18.4	11.1	16.7	17.5	23.8	11.1	7.7	14.1		
More than 20,000	16.1	13.0	8.6	16.3	46.7	15.8	22.2	10.0	9.5	9.5	22.2	23.1	14.4		
USOE Region														124.39	.041
1	8.9	0.0	7.1	4.7	0.0	0.0	11.1	10.0	9.5	9.5	0.0	0.0	5.1		
2	3.6	8.7	8.6	4.7	20.0	5.3	0.0	3.3	9.5	9.5	11.1	0.0	6.2		
3	16.1	13.0	5.7	7.0	13.3	18.4	0.0	13.3	4.8	14.3	22.2	0.0	6.9		
8	23.2	30.4	27.1	25.6	20.0	26.3	22.2	13.3	28.6	9.5	33.3	23.1	10.3		
5	16.1	21.7	17.1	16.3	0.0	10.5	0.0	20.0	12.7	28.6	0.0	0.0	24.4		
6	14.3	0.0	8.6	4.7	6.7	10.5	11.1	6.7	6.3	4.8	22.2	15.4	14.6		
7	3.6	13.0	7.1	9.3	0.0	2.6	0.0	10.0	4.8	9.5	0.0	0.0	8.5		
8	0.0	4.3	7.1	4.7	6.7	0.0	0.0	3.3	6.3	4.8	0.0	0.0	5.9		
9	7.1	8.7	8.6	20.9	33.3	13.2	44.4	13.3	14.3	0.0	0.0	61.5	3.8		
10	7.1	0.0	2.9	2.3	0.0	13.2	11.1	6.7	3.2	9.5	11.1	0.0	14.4		

(continued)

Table H.1 (continued)

INSTITUTIONAL CHARACTERISTICS[a]	CLUSTER												Row[c] %	Chi Square	P Value
	A	B	C	D	E	F	G	H	I	J	K	L			
Type Accreditation														28.75	.002
Fully Accredited	89.3[b]	82.6	90.0	81.4	100.0	97.4	88.9	83.3	77.8	57.1	88.9	100.0	85.6		
Other than fully accredited	10.7	17.4	10.0	18.6	0.0	2.6	11.1	16.7	22.2	42.9	11.1	0.0	14.4		
Total Undergraduate Enrollment														160.95	.000
0-2500	66.1	60.9	57.1	46.5	0.0	2.3	22.2	46.7	61.9	76.2	11.1	0.0	49.2		
2,501-8,000	28.6	34.8	34.3	32.6	6.7	57.9	11.1	30.0	33.3	19.0	33.3	15.4	32.1		
More than 8,000	5.4	4.3	8.6	20.9	93.3	18.4	66.7	23.3	4.8	4.8	55.6	84.6	18.7		
Undergraduate Veterans Enrolled														68.10	.000
Less than 500	60.7	60.9	54.3	44.2	6.7	26.3	0.0	60.0	65.1	76.2	0.0	0.0	49.0		
500 or more	39.3	39.1	45.7	55.8	93.3	73.7	100.0	40.0	34.9	23.8	100.0	100.0	51.0		
Average Annual Per Capita Instructional Expenditures														22.82	.018
$750 or less	32.1	13.0	34.3	32.6	13.3	26.3	22.2	23.3	31.7	0.0	55.6	53.8	28.7		
More than $750	67.9	87.0	65.7	67.4	86.7	73.7	77.8	76.7	68.3	100.0	44.4	46.2	71.3		
Planned Per Capita Instructional Expenditures														23.21	.016
$750 or Less	25.0	8.7	30.0	23.3	6.7	23.7	22.2	16.7	25.4	0.0	44.4	53.8	23.3		
More than $750	75.0	91.3	70.0	76.7	93.3	76.3	77.8	83.3	74.6	100.0	55.6	46.2	76.7		

[a] Variables included under Institutional Characteristics are those variables forming the first of nine _a priori_ variable sets used during data reduction.

[b] Percentages are based on non-weighted data and estimate the relative number of institutions in each cell.

[c] Row percentages are based upon 390 institutions as a result of data reduction techniques and clustering procedures.

NOTE: All entries and calculations are based on non-weighted data.

Table H.2
Percentage of VCIP Resource Level by Cluster

VCIP RESOURCE LEVEL[a]	CLUSTER												Row[c] %	Chi Square	P Value
	A	B	C	D	E	F	G	H	I	J	K	L			
Application Status														16.9	0.110
Initial	30.4[b]	30.4	11.4	16.3	26.7	18.4	33.3	26.7	19.0	23.8	0.0	0.0	20.0		
Renewal	69.6	69.6	88.6	83.7	73.3	81.6	66.7	73.3	81.0	76.2	100.0	100.0	80.0		
FTE Category I Veterans														78.8	0.000
Less than 500	71.4	69.6	60.0	51.2	20.0	36.8	0.0	66.7	71.4	90.5	0.0	0.0	56.7		
More than 500	28.6	30.4	40.0	48.8	80.0	63.2	100.0	33.3	28.6	9.5	100.0	100.0	43.3		
FTE Category II Veterans														76.3	0.000
0	25.0	43.5	25.7	20.9	20.0	7.9	0.0	26.7	41.3	33.3	0.0	23.1	25.9		
.01-70	64.3	52.2	52.9	65.1	46.7	52.6	44.4	56.7	36.5	57.1	0.0	38.5	51.5		
More than 70	10.7	4.3	21.4	14.0	33.3	39.5	55.6	16.7	22.2	9.5	100.0	38.5	22.6		
No. of Category I Veterans (April 1975)														78.8	0.000
Less than 500	71.4	69.6	60.0	51.2	20.0	36.8	0.0	66.7	71.4	90.5	0.0	0.0	56.7		
More than 500	28.6	30.4	40.0	48.8	80.0	63.2	100.0	33.3	28.6	9.5	100.0	100.0	43.3		
No. of Category II Veterans (April 1975)														76.4	0.000
0	26.8	39.1	22.9	20.9	20.0	7.9	0.0	26.7	44.4	33.3	0.0	23.1	25.9		
.01-70	60.7	56.5	55.7	65.1	46.7	55.3	44.4	56.7	36.5	57.1	0.0	38.5	52.1		
More than 70	12.5	4.3	21.4	14.0	33.3	36.8	55.6	16.7	19.0	9.5	100.0	38.5	22.1		
No. of Category I Veterans (October 1975)														80.3	0.000
Less than 500	62.5	65.2	51.4	41.9	13.3	28.9	0.0	60.0	73.0	95.2	0.0	7.7	51.8		
More than 500	37.5	34.8	48.6	58.1	86.7	71.1	100.0	40.0	27.0	4.8	100.0	92.3	48.2		

(continued)

Table H.2 (continued)

VCIP RESOURCE LEVEL[a]	CLUSTER A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value
No. of Category II Veterans (October 1975)														80.4	.000
0	26.8[b]	39.1	17.1	25.6	20.0	7.9	0.0	36.7	42.9	38.1	0.0	23.1	26.2		
.01-70	55.4	56.5	57.1	58.1	40.0	55.3	33.3	43.3	44.4	57.1	0.0	30.8	50.3		
More than 70	17.9	4.3	25.7	16.3	40.0	36.8	66.7	20.0	12.7	4.8	100.0	46.2	23.6		
No. of Category I Veterans (February 1976)														79.5	.000
Less than 500	60.7	69.6	51.4	41.9	13.3	31.6	0.0	60.0	73.0	90.5	0.0	0.0	51.5		
More than 500	39.3	30.4	48.6	58.1	86.7	68.4	100.0	40.0	27.0	9.5	100.0	100.0	48.5		
No. of Category II Veterans (February 1976)														68.7	.000
0	21.4	39.1	18.6	20.9	13.3	10.5	0.0	30.0	41.3	28.6	0.0	23.1	23.8		
.01-70	57.1	52.2	57.1	55.8	40.0	52.6	44.4	56.7	44.4	61.9	0.0	30.8	51.3		
More than 70	21.4	8.7	24.3	23.3	46.7	36.8	55.6	13.3	14.3	9.5	100.0	46.2	24.9		

[a] Variables included under VCIP Resource Level are those variables forming the second of nine *a priori* variable sets used during data reduction.

[b] Percentages are based on non-weighted data and estimate the relative number of institutions in each cell.

[c] Row percentages are based upon 390 institutions as a result of data reduction techniques and clustering procedures.

NOTE: All entries and calculations are based on non-weighted data.

Table H.3
Percentage of OVA Expenditures and Obligations by Cluster

	CLUSTER														
OVA EXPENDITURES AND OBLIGATIONS[a]	A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value
Funds from VCIP for Personal Services														110.9	.000
Less than 5,000	17.9[b]	26.1	21.4	18.6	0.0	5.3	11.1	20.0	22.2	52.4	0.0	0.0	18.7		
5,001-10,000	42.9	26.1	27.1	16.3	0.0	18.4	0.0	40.0	34.9	23.8	0.0	0.0	26.2		
10,001-1,500	17.9	21.7	15.7	20.9	20.0	18.4	0.0	13.3	20.6	23.8	11.1	0.0	17.4		
More than 15,000	21.4	26.1	35.7	44.2	80.0	57.9	88.9	26.7	22.2	0.0	88.9	100.0	37.7		
Non VCIP Funds for Personal Services														40.8	.008
0	25.0	34.8	40.0	48.8	26.7	39.5	77.8	26.7	23.8	23.8	55.6	69.2	35.6		
.01-5,000	35.7	34.8	27.1	23.3	13.3	13.2	0.0	43.3	31.7	33.3	11.1	7.7	27.2		
More than 5,000	39.3	30.4	32.9	27.9	60.0	47.4	22.2	30.0	44.4	42.9	33.3	23.1	37.2		
Funds from VCIP for Employee Benefits														164.6	.000
0	30.4	26.1	22.9	20.9	13.3	21.1	11.1	33.3	39.7	42.9	11.1	15.4	27.2		
.01-1,000	30.4	30.4	31.4	20.9	13.3	10.5	0.0	16.7	22.2	47.6	0.0	0.0	23.1		
1,001-5,000	37.5	43.5	40.0	53.5	53.3	60.5	66.7	43.3	34.9	9.5	22.2	7.7	40.8		
More than 5,000	1.8	0.0	5.7	4.7	20.0	7.9	22.2	6.7	3.2	0.0	66.7	76.9	9.0		
Non VCIP Funds for Employee Benefits														21.4	.498
0	58.9	65.2	51.4	62.8	60.0	57.9	77.8	56.7	46.0	52.4	66.7	61.5	56.4		
.01-1,000	16.1	17.4	31.4	18.6	6.7	15.8	0.0	20.0	28.6	19.0	11.1	0.0	20.3		
More than 1,000	25.0	17.4	17.1	18.6	33.3	26.3	22.2	23.3	25.4	28.6	22.2	38.5	23.3		
Funds from VCIP for Workshop/Conferences														13.6	.252
0	80.4	82.6	77.1	67.4	66.7	68.4	55.6	80.0	81.0	76.2	77.8	46.2	74.9		
More than 0	19.6	17.4	22.9	32.6	33.3	31.6	44.4	20.0	19.0	23.8	22.2	53.8	25.1		

(continued)

Table H.3 (continued)

	CLUSTER														
OVA EXPENDITURES AND OBLIGATIONS[a]	A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value
Non VCIP Funds for Workshop/Conferences														7.1	.793
0	85.7[b]	78.3	87.1	93.0	93.3	84.2	100.0	90.0	87.3	95.2	88.9	92.3	88.2		
More than 0	14.3	21.7	12.9	7.0	6.7	15.8	0.0	10.0	12.7	4.8	11.1	7.7	11.8		
Funds from VCIP for Travel														65.9	.000
0	39.3	39.1	35.7	30.2	0.0	26.3	11.1	36.7	44.4	28.6	0.0	15.4	32.6		
.01-1,000	53.6	52.2	55.7	55.8	66.7	65.8	66.7	50.0	50.8	61.9	22.2	53.8	55.1		
More than 1,000	7.1	8.7	8.6	14.0	33.3	7.9	22.2	13.3	4.8	9.5	77.8	30.8	12.3		
Non VCIP Funds for Travel														29.2	.002
0	62.5	73.9	70.0	93.0	86.7	68.4	100.0	73.3	77.8	52.4	88.9	100.0	74.9		
More than 0	37.5	26.1	30.0	7.0	13.3	31.6	0.0	26.7	22.2	47.6	11.1	0.0	25.1		
Funds from VCIP for Equipment Purchases														38.7	.015
0	69.6	73.9	75.7	65.1	60.0	60.5	44.4	70.0	66.7	61.9	33.3	30.8	65.6		
.01-1,000	25.0	21.7	17.1	23.3	13.3	28.9	44.4	20.0	27.0	28.6	22.2	30.8	23.8		
More than 1,000	5.4	4.3	7.1	11.6	26.7	10.5	11.1	10.0	6.3	9.5	44.4	38.5	10.5		
Non VCIP Funds for Equipment Purchases														3.7	.977
0	91.1	91.3	90.0	90.7	93.3	86.8	100.0	93.3	87.3	95.2	88.9	84.6	90.3		
More than 0	8.9	8.7	10.0	9.3	6.7	13.2	0.0	6.7	12.7	4.8	11.1	15.4	9.7		
Funds from VCIP for Supplies														61.6	.000
0	35.7	30.4	34.3	23.3	0.0	23.7	0.0	36.7	33.3	38.1	0.0	0.0	28.2		
.01-1,000	57.1	60.9	55.7	53.5	53.3	57.9	55.6	46.7	54.0	52.4	66.7	30.8	54.4		
More than 1,000	7.1	8.7	10.0	23.3	46.7	18.4	44.4	16.7	12.7	9.5	33.3	69.2	17.4		
Non VCIP funds for Supplies														14.4	.211
0	53.6	60.9	64.3	81.4	66.7	60.5	88.9	66.7	60.3	57.1	66.7	84.6	64.6		
More than 0	46.4	39.1	35.7	18.6	33.3	39.5	11.1	33.3	39.7	42.9	33.3	15.4	35.4		

(continued)

Table H.3 (continued)

OVA EXPENDITURES AND OBLIGATIONS[a]	CLUSTER A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value
Total VCIP funds for OVA Expenditures														219.1	.000
Less than 10,000	48.2[b]	47.8	40.0	30.2	0.0	13.2	0.0	36.7	44.4	71.4	0.0	0.0	35.4		
10,001-20,000	28.6	26.1	25.7	25.6	26.7	31.6	11.1	40.0	38.1	28.6	11.1	0.0	28.5		
20,001-40,000	23.2	26.1	25.7	32.6	40.0	34.2	11.1	20.0	12.7	0.0	0.0	0.0	21.8		
More than 40,000	0.0	0.0	8.6	11.6	33.3	21.1	77.8	3.3	4.8	0.0	88.9	100.0	14.4		
Total Non VCIP funds for OVA Expenditures														55.4	.117
0	16.1	21.7	30.0	32.6	26.7	26.3	44.4	23.3	17.5	19.0	55.6	53.8	25.9		
.01-5,000	30.4	43.5	31.4	34.9	13.3	23.7	22.2	36.7	31.7	33.3	0.0	7.7	29.7		
5,001-10,000	19.6	13.0	20.0	9.3	0.0	15.8	0.0	13.3	23.8	14.3	11.1	7.7	15.9		
10,001-20,000	17.9	8.7	10.0	7.0	13.3	18.4	11.1	16.7	17.5	23.8	11.1	7.7	14.1		
More than 20,000	16.1	13.0	8.6	16.3	46.7	15.8	22.2	10.0	9.5	9.5	22.2	23.1	14.4		
Institutional Share														55.8	.000
0	76.8	82.6	80.0	62.8	53.3	50.0	22.2	70.0	84.1	90.5	22.2	30.8	70.0		
More than 0	23.2	17.4	20.0	37.2	46.7	50.0	77.8	30.0	15.9	9.5	77.8	69.2	30.0		
Balance														11.8	.374
0	64.3	47.8	71.4	72.1	66.7	55.3	66.7	56.7	71.4	81.0	66.7	76.9	66.7		
More than 0	35.7	52.2	28.6	27.9	33.3	44.7	33.3	43.3	28.6	19.0	33.3	23.1	33.3		

[a] Variables included under OVA Expenditures and Obligations are those variables forming the third of nine *a priori* variable sets used during data reduction.

[b] Percentages are based on non-weighted data and estimate the relative number of institutions in each cell.

[c] Row percentages are based upon 390 institutions as a result of data reduction techniques and clustering procedures.

NOTE: All entries and calculations are based on non-weighted data.

Table H.4
Percentage of OVA Personal Services Offered by Cluster

OVA PERSONAL SERVICES OFFERED[a]	CLUSTER A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value
No. of Full-Time OVA Persons														37.4	.000
0	35.7[b]	17.4	38.6	30.2	33.3	57.9	22.2	13.3	15.9	57.1	11.1	46.2	32.3		
0.50-1.00	64.3	82.6	61.4	69.8	66.7	42.1	77.8	86.7	84.1	42.9	88.9	53.8	67.7		
No. of FTE OVA Persons														37.3	.000
0	33.9	17.4	38.6	30.2	33.3	57.9	22.2	13.3	15.9	57.1	11.1	46.2	32.1		
0.50-1.00	66.1	82.6	61.4	69.8	66.7	42.1	77.8	86.7	84.1	42.9	88.9	53.8	67.9		
VCIP Funds for OVA Persons														83.8	.000
0	46.4	26.1	42.9	37.2	46.7	60.5	22.2	23.3	19.0	76.2	11.1	46.2	39.0		
.01-10,000	39.3	52.2	27.1	34.9	13.3	26.3	22.2	46.7	65.1	23.8	11.1	7.7	36.9		
More than 10,000	14.3	21.7	30.0	27.9	40.0	13.2	55.6	30.0	15.9	0.0	77.8	46.2	24.1		
Total Funds for OVA Persons														67.9	.000
0	33.9	21.7	38.6	30.2	33.3	57.9	22.2	13.3	15.9	57.1	11.1	46.2	32.3		
.01-10,000	37.5	52.2	21.4	37.2	13.3	21.1	11.1	46.7	54.0	28.6	11.1	0.0	33.3		
More than 10,000	28.6	26.1	40.0	32.6	53.3	21.1	66.7	40.0	30.2	14.3	77.8	53.8	34.4		
No. of Full-Time Coordinators														42.2	.000
0	69.6	91.3	74.3	69.8	66.7	42.1	77.8	90.0	87.3	66.7	77.8	38.5	72.6		
More than 0	30.4	8.7	25.7	30.2	33.3	57.9	22.2	10.0	12.7	33.3	22.2	61.5	27.4		
No. of FTE Coordinators														55.2	.000
0	57.1	73.9	60.0	62.8	53.3	34.2	55.6	86.7	68.3	38.1	55.6	38.5	59.2		
.01-.5	12.5	17.4	14.3	7.0	13.3	7.9	22.2	3.3	19.0	28.6	11.1	0.0	13.1		
More than .5	30.4	8.7	25.7	30.2	33.3	57.9	22.2	10.0	12.7	33.3	33.3	61.5	27.7		
VCIP Funds for Coordinators														93.6	.000
0	66.1	82.6	74.3	65.1	60.0	39.5	66.7	90.0	77.8	52.4	66.7	38.5	67.7		
.01-10,000	30.4	13.0	17.1	16.3	26.7	15.8	22.2	10.0	20.6	42.9	22.2	7.7	20.3		
More than 10,000	3.6	4.3	8.6	18.6	13.3	44.7	11.1	0.0	1.6	4.8	11.1	53.8	12.1		

(continued)

Table H.4 (continued)

	CLUSTER														
OVAL PERSONAL SERVICES OFFERED[a]	A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value
Total funds for Coordinators														89.1	.000
0	57.1[b]	73.9	60.0	62.8	53.3	34.2	55.6	86.7	68.3	38.1	55.6	38.5	59.2		
.01-10,000	37.5	21.7	25.7	18.6	26.7	15.8	22.2	13.3	28.6	52.4	33.3	7.7	25.9		
More than 10,000	5.4	4.3	14.3	18.6	20.0	50.0	22.2	0.0	3.2	9.5	11.1	53.8	14.9		
No. of Full-Time Counselors														38.7	.000
0	87.5	100.0	92.9	83.7	66.7	84.2	100.0	93.3	98.4	90.5	77.8	53.8	89.0		
More than 0	12.5	0.0	7.1	16.3	33.3	15.8	0.0	6.7	1.6	9.5	22.2	46.2	11.0		
No. of FTE Counselors														67.2	.000
0	58.9	78.3	64.3	69.8	20.0	57.9	55.6	60.0	69.8	61.9	33.3	7.7	60.3		
.01-.5	23.2	17.4	17.1	4.7	13.3	13.2	22.2	10.0	22.2	28.6	11.1	23.1	17.2		
More than .5	17.9	4.3	18.6	25.6	66.7	28.9	22.2	30.0	7.9	9.5	55.6	69.2	22.6		
VCIP funds for Counselors														100.8	.000
0	82.1	87.0	70.0	74.4	33.3	68.4	55.6	83.3	82.5	81.0	33.3	7.7	72.1		
.01-5,000	8.9	13.0	18.6	9.3	26.7	10.5	33.3	10.0	14.3	14.3	11.1	7.7	13.6		
More than 5,000	8.9	0.0	11.4	16.3	40.0	21.1	11.1	6.7	3.2	4.8	55.6	84.6	14.4		
Total funds for Counselors														69.3	.000
0	58.9	78.3	64.3	67.4	20.0	57.9	55.6	60.0	68.3	61.9	33.3	7.7	59.7		
.01-5000	19.6	17.4	18.6	9.3	26.7	2.6	11.1	16.7	20.6	28.6	11.1	7.7	16.4		
More than 5000	21.4	4.3	17.1	23.3	53.3	39.5	33.3	23.3	11.1	9.5	55.6	84.6	23.8		
No. of Full-Time Outreach Workers														18.1	.078
0	98.2	100.0	100.0	97.7	100.0	100.0	100.0	96.7	96.8	100.0	100.0	84.6	98.2		
More than 0	1.8	0.0	0.0	2.3	0.0	0.0	0.0	3.3	3.2	0.0	0.0	15.4	1.8		
No. of FTE Outreach Workers														44.8	.003
0	62.5	78.3	78.6	81.4	40.0	63.2	66.7	73.3	71.4	71.4	55.6	38.5	69.5		
.01-.5	23.2	21.7	12.9	4.7	13.3	15.8	0.0	10.0	22.2	14.3	33.3	30.8	16.4		
More than .5	14.3	0.0	8.6	14.0	46.7	21.1	33.3	16.7	6.3	14.3	11.1	30.8	14.1		

(continued)

Table H.4 (continued)

OVA PERSONAL SERVICES OFFERED[a]	CLUSTER A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value
VCIP Funds for Outreach Workers														32.4	.001
0	82.1[b]	95.7	84.3	83.7	53.3	68.4	66.7	86.7	79.4	85.7	55.6	38.5	78.7		
More than 0	17.9	4.3	15.7	16.3	46.7	31.6	33.3	13.3	20.6	14.3	44.4	61.5	21.3		
Total funds for Outreach Workers														20.3	.041
0	64.3	78.3	77.1	81.4	40.0	63.2	66.7	73.3	71.4	71.4	55.6	38.5	69.5		
More than 0	35.7	21.7	22.9	18.6	60.0	36.8	33.3	26.7	28.6	28.6	44.4	61.5	30.5		
No. of Full-Time Recruiters														10.3	.499
0	92.9	100.0	98.6	93.0	93.3	100.0	100.0	96.7	96.8	100.0	88.9	92.3	96.4		
More than 0	7.1	0.0	1.4	7.0	6.7	0.0	0.0	3.3	3.2	0.0	11.1	7.7	3.6		
No. of FTE Recruiters														20.0	.045
0	78.6	82.6	80.0	90.7	46.7	84.2	88.9	66.7	84.1	85.7	66.7	76.9	80.0		
More than 0	21.4	17.4	20.0	9.3	53.3	15.8	11.1	33.3	15.9	14.3	33.3	23.1	20.0		
VCIP Funds for Recruiters														24.3	.012
0	83.9	95.7	92.9	90.7	60.0	86.8	88.9	90.0	90.5	100.0	66.7	76.9	88.2		
More than 0	16.1	4.3	7.1	9.3	40.0	13.2	11.1	10.0	9.5	0.0	33.3	23.1	11.8		
Total Funds for Recruiters														18.0	.081
0	78.6	82.6	80.0	88.4	46.7	84.2	88.9	66.7	82.5	85.7	66.7	76.9	79.5		
More than 0	21.4	17.4	20.0	11.6	53.3	15.8	11.1	33.3	17.5	14.3	33.3	23.1	20.5		
No. of Full-Time Secretaries														41.8	.000
0	76.8	82.6	61.4	67.4	66.7	42.1	55.6	70.0	79.4	100.0	33.3	38.5	67.9		
More than 0	23.2	17.4	38.6	32.6	33.3	57.9	44.4	30.0	20.6	0.0	66.7	61.5	32.1		
No. of FTE Secretaries														81.4	.000
0	57.1	43.5	42.9	46.5	20.0	21.1	11.1	30.0	44.4	47.6	0.0	38.5	40.0		
.01-.5	16.1	34.8	15.7	11.6	20.0	5.3	11.1	33.3	31.7	47.6	11.1	0.0	20.5		
More than .5	26.8	21.7	41.4	41.9	60.0	73.7	77.8	36.7	23.8	4.8	88.9	61.5	39.5		

(continued)

Table H.4 (continued)

	CLUSTER														
OVA PERSONAL SERVICES OFFERED[a]	A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	F Value
VCIP Funds for Secretaries														85.5	.000
0	67.9[b]	69.6	51.4	60.5	20.0	26.3	11.1	46.7	66.7	61.9	11.1	38.5	52.6		
.01-5000	25.0	17.4	21.4	14.0	33.3	31.6	11.1	36.7	22.2	38.1	22.2	0.0	23.6		
More than 5000	7.1	13.0	27.1	25.6	46.7	42.1	77.8	16.7	11.1	0.0	66.7	61.5	23.8		
Total Funds for Secretaries														75.7	.000
0	55.4	43.5	41.4	46.5	13.3	21.1	11.1	30.0	44.4	42.9	0.0	38.5	39.0		
.01-5000	32.1	34.8	25.7	23.3	26.7	26.3	11.1	46.7	39.7	52.4	22.2	0.0	31.0		
More than 0	12.5	21.7	32.9	30.2	60.0	52.6	77.8	23.3	15.9	4.8	77.8	61.5	30.0		
No. of Full-Time Clerks														78.3	.000
0	92.9	95.7	91.4	86.0	86.7	89.5	88.9	96.7	90.5	90.5	55.6	15.4	87.7		
More than 0	7.1	4.3	8.6	14.0	13.3	10.5	11.1	3.3	9.5	9.5	44.4	84.6	12.3		
No. of FTE Clerks														77.5	.000
0	66.1	69.6	68.6	55.8	40.0	63.2	44.4	66.7	66.7	81.0	22.2	0.0	61.5		
.01-.5	21.4	26.1	14.3	18.6	26.7	10.5	33.3	10.0	19.0	9.5	0.0	7.7	16.7		
More than .5	12.5	4.3	17.1	25.6	33.3	26.3	22.2	23.3	14.3	9.5	77.8	92.3	21.8		
VCIP Funds for Clerks														152.8	.000
0	78.6	73.9	77.1	62.8	46.7	71.1	44.4	83.3	77.8	85.7	22.2	0.0	70.3		
.01-5000	19.6	26.1	14.3	25.6	46.7	18.4	33.3	16.7	17.5	9.5	11.1	7.7	19.2		
More than 5000	1.8	0.0	8.6	11.6	6.7	10.5	22.2	0.0	4.8	4.8	66.7	92.3	10.5		
Total Funds for Clerks														104.7	.000
0	66.1	69.6	65.7	53.5	40.0	63.2	44.4	66.7	66.7	81.0	22.2	0.0	60.8		
.01-5000	25.0	30.4	18.6	30.2	40.0	23.7	33.3	30.0	27.0	14.3	11.1	7.7	24.6		
More than 5000	8.9	0.0	15.7	16.3	20.0	13.2	22.2	3.3	6.3	4.8	66.7	92.3	14.6		

(continued)

Table H.4 (continued)

OVA PERSONAL SERVICES OFFERED[a]	CLUSTER A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value
Total No. of Full-Time Personnel														78.3	.000
0	5.4[b]	4.3	7.1	2.3	6.7	0.0	22.2	3.3	3.2	19.0	0.0	0.0	5.1		
.5-1.0	55.4	78.3	48.6	51.2	33.3	31.6	22.2	63.3	68.3	66.7	0.0	0.0	51.3		
More than 1.0	39.3	17.4	44.3	46.5	60.0	68.4	55.6	33.3	28.6	14.3	100.0	100.0	43.6		
Total No. of FTE Personnel														60.6	.000
Less than 1.0	23.2	26.1	22.9	20.9	0.0	13.2	11.1	10.0	17.5	38.1	0.0	0.0	18.5		
1.0-1.5	14.3	39.1	21.4	18.6	13.3	5.3	0.0	36.7	30.2	38.1	0.0	0.0	21.0		
More than 1.5	62.5	34.8	55.7	60.5	86.7	81.6	88.9	53.3	52.4	23.8	100.0	100.0	60.5		
Total VCIP funds for OVA Personnel														79.9	.000
Less than 5,000	21.4	26.1	21.4	18.6	0.0	5.3	11.1	20.0	22.2	52.4	0.0	0.0	19.2		
5,001-10,000	42.9	30.4	27.1	16.3	0.0	18.4	0.0	40.0	34.9	23.8	0.0	0.0	26.4		
More than 10,000	35.7	43.5	51.4	65.1	100.0	76.3	88.9	40.0	42.9	23.8	100.0	100.0	54.4		
Total Funds for OVA Personnel														139.0	.000
Less than 10,000	32.1	30.4	28.6	25.6	0.0	7.9	11.1	33.3	27.0	38.1	0.0	0.0	24.4		
10,001-15,000	12.5	30.4	27.1	20.9	0.0	10.5	0.0	26.7	34.9	42.9	11.1	0.0	22.1		
15,001-30,000	41.1	34.8	30.0	30.2	26.7	42.1	44.4	23.3	30.2	9.5	11.1	0.0	30.3		
More than 30,000	14.3	4.3	14.3	23.3	73.3	39.5	44.4	16.7	7.9	9.5	77.8	100.0	23.3		

[a] Variables included under OVA Personal Services Offered are those variables forming the fourth of nine *a priori* variable sets used during data reduction.

[b] Percentages are based on non-weighted data and estimate the relative number of institutions in each cell.

[c] Row percentages are based upon 390 institutions as a result of data reduction techniques and clustering procedures.

NOTE: All entries and calculations are based on non-weighted data.

Table H.5
Percentage of Outreach and Recruitment Services by Cluster

	CLUSTER															
OUTREACH AND RECRUITMENT[a]	A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value	G Value
Formal needs survey	21.4[b]	13.0	24.3	32.6	40.0	18.4	33.3	20.0	9.5	9.5	22.2	30.8	21.0	16.47	.124	.82
Personal contact with walkins	33.9	26.1	14.3	30.2	20.0	31.6	22.2	30.0	17.5	23.8	66.7	7.7	24.9	21.23	.031	.39
Meetings, records, other agency contacts	30.4	21.7	20.0	16.3	33.3	21.1	22.2	50.0	23.8	23.8	11.1	30.8	25.1	15.74	.151	.50
OVA contacts in the field	14.3	13.0	21.4	25.6	20.0	7.9	33.3	23.3	23.8	28.6	33.3	7.7	20.0	11.22	.425	.57
Consult veterans services	26.8	30.4	14.3	25.6	53.3	47.4	22.2	33.3	17.5	19.0	22.2	15.4	25.6	24.94	.009	.59
General procedures for veterans	14.3	8.7	8.6	18.6	20.0	44.7	0.0	10.0	12.7	19.0	0.0	15.4	15.6	33.11	.000	.09
Flyers and Letters	35.7	60.9	40.0	39.5	40.0	21.1	66.7	43.3	33.3	14.3	33.3	23.1	36.4	20.39	.040	.28
Combination of media and special events	39.3	47.8	45.7	27.9	60.0	47.4	77.8	56.7	30.2	38.6	55.6	46.2	42.1	20.16	.043	.42
Means of identification	33.9	30.4	40.0	23.3	40.0	47.4	44.4	40.0	17.5	33.3	33.3	30.8	33.1	15.46	.162	.20
Publications, pamphlets, gimmicks	62.5	56.5	58.6	74.4	100.0	63.2	77.8	56.7	47.6	47.6	100.0	84.6	62.6	29.82	.002	.57
Local newspaper	71.4	52.2	50.0	69.8	46.7	55.3	77.8	73.3	55.6	42.9	33.3	53.8	58.5	18.49	.071	.64
Outdoor advertising	33.9	30.4	15.7	37.2	40.0	28.9	66.7	43.3	22.2	4.8	22.2	46.2	28.7	27.77	.003	.93
Radio and/or TV	48.2	60.9	41.4	60.5	60.0	57.9	88.9	56.7	42.9	47.6	44.4	61.5	51.5	14.40	.211	.73
Personal appearance at strategic locations	25.0	43.5	25.7	34.9	33.3	50.0	33.3	23.3	19.0	28.6	66.7	46.2	31.0	22.14	.023	.47
Letters	48.2	0.0	15.7	44.2	46.7	73.7	33.3	30.0	30.2	33.3	44.4	30.8	35.4	56.78	.000	.68

(continued)

Table H.5 (continued)

	CLUSTER															
OUTREACH AND RECRUITMENT[a]	A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value	G Value
Personal contacts	51.8[b]	43.5	45.7	69.8	33.3	42.1	22.2	56.7	36.5	33.3	88.9	53.8	47.7	25.29	.008	.19
Direct contact with schools and agencies	50.0	17.4	25.7	37.2	26.7	36.8	33.3	30.0	28.6	19.0	33.3	38.5	32.3	15.19	.174	.45
Recruitment success	23.2	30.4	21.4	25.6	40.0	23.7	33.3	33.3	22.2	23.8	33.3	38.5	25.9	5.78	.887	.60
Positive outcomes	33.9	26.1	32.9	39.5	26.7	31.6	44.4	33.3	14.3	19.0	33.3	38.5	29.7	13.04	.291	.41
Recruitment difficulties	16.1	17.4	21.4	20.9	6.7	7.9	55.6	20.0	1.6	4.8	44.4	15.4	15.4	34.10	.000	.36

[a] Variables included under Outreach and Recuritment are those variables forming the fifth of nine _a priori_ variable sets used during data reduction.

[b] Percentages are based on non-weighted data and estimate the relative number of institutions in each cell.

[c] Row percentages are based upon 390 institutions as a result of data reduction techniques and clustering procedures.

NOTE: All entries and calculations are based on non-weighted data.

Table H.6
Percentage of Available Services by Cluster

	CLUSTER															
AVAILABLE SERVICES[a]	A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value	G Value
Coordination of Special Education														56.82	.006	.42
Code 0	44.6[b]	17.4	27.1	53.5	13.3	34.2	11.1	30.0	60.3	47.6	22.2	53.8	39.2			
Code 1	39.3	60.9	47.1	34.9	33.3	44.7	66.7	46.7	28.6	38.1	44.4	23.1	40.8			
Code 2	1.8	0.0	0.0	0.0	0.0	6.7	5.3	0.0	0.0	1.6	0.0	0.0	1.3			
Code 3	14.3	21.7	25.7	11.6	46.7	15.8	22.2	23.3	9.5	14.3	33.3	23.1	18.7			
General remedial services	10.7	30.4	52.9	37.2	73.3	44.7	11.1	40.0	34.9	23.8	55.6	15.4	36.2	42.67	.000	.46
Mathematics remedial courses	60.7	17.4	25.7	30.2	6.7	23.7	77.8	26.7	12.9	33.3	55.6	76.9	31.8	64.87	.000	.94
English remedial courses	60.7	13.0	32.9	23.3	6.7	23.7	88.9	26.7	14.3	38.1	33.3	76.9	32.3	67.11	.000	.94
Reading remedial courses	58.9	26.1	24.3	27.9	6.7	26.3	66.7	30.0	12.7	38.1	22.2	53.8	30.5	46.48	.000	.93
Academic study skills	28.6	26.1	31.4	9.3	20.0	28.9	66.7	26.7	11.1	4.8	33.3	38.5	22.8	31.11	.001	.63
GED, ABE	21.4	30.4	22.9	18.6	20.0	21.1	22.2	33.3	11.1	23.8	66.7	30.8	22.6	18.61	.068	.83
Motivational services	33.9	21.7	42.9	25.6	40.0	42.1	55.6	36.7	23.8	28.6	33.3	53.8	34.4	14.04	.231	.41
Tutorial services	76.8	69.6	82.9	72.1	80.0	84.2	88.9	93.3	71.4	71.4	77.8	100.0	78.0	14.49	.207	.23
Study Centers	30.4	30.4	32.9	30.2	26.7	36.8	11.1	13.3	9.5	28.6	44.4	30.8	26.4	19.24	.057	.51

[a] Variables included under Available Services are those variables forming the sixth of nine *a priori* variable sets used during data reduction.

[b] Percentages are based on non-weighted data and estimate the relative number of institutions in each cell.

[c] Row percentages are based upon 390 institutions as a result of data reduction techniques and clustering procedures.

NOTE: All entries and calculations are based on non-weighted data.

Table H.7
Percentage of Professional Assistance Available by Cluster

	CLUSTER															
PROFESSIONAL ASSISTANCE AVAILABLE[a]	A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value	G Value
Personal counseling	87.5[b]	87.0	84.3	62.8	100.0	92.1	88.9	86.7	19.0	66.7	77.8	92.3	72.8	127.12	.000	.46
Family counseling	75.0	56.5	61.4	53.5	80.0	73.7	66.7	63.3	7.9	61.9	77.8	53.8	55.9	79.63	.000	.51
Career counseling	87.5	82.6	82.9	65.1	93.3	84.2	100.0	86.7	19.0	71.4	88.9	84.6	72.1	116.01	.000	.55
Educational counseling	83.9	82.6	91.4	67.4	100.0	100.0	100.0	90.0	33.3	76.2	77.8	92.3	77.9	106.24	.000	.56
Financial counseling	28.6	69.6	22.9	7.0	33.3	60.5	44.4	10.0	15.9	23.8	44.4	23.1	27.7	62.79	.000	.66
General counseling	37.5	82.6	25.7	34.9	20.0	44.7	55.6	20.0	52.4	38.1	33.3	46.2	39.5	37.28	.000	.56
Job placement	21.4	69.6	12.9	16.3	33.3	68.4	66.7	13.3	12.7	9.5	33.3	23.1	25.9	87.18	.000	.64
Coordination of counseling services														81.95	.000	.18
No response	10.7	0.0	17.1	23.3	0.0	2.6	0.0	3.3	39.7	23.8	22.2	7.7	16.2			
OVA does all counseling	1.8	0.0	0.0	0.0	13.3	0.0	0.0	0.0	4.8	0.0	0.0	0.0	1.5			
OVA refers only	21.4	17.4	14.3	9.3	26.7	10.5	11.1	16.7	14.3	23.8	0.0	7.7	15.1			
OVA provides services and refers	66.1	82.6	68.6	67.4	60.0	86.8	88.9	80.0	41.3	52.4	77.8	84.6	67.2			
Number of veterans receiving services or referred														126.11	.000	.73
No response	46.4	47.8	60.0	41.9	60.0	42.1	0.0	33.3	65.1	52.4	11.1	61.5	49.5			
None	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.5			
1-99	5.4	17.4	5.7	14.0	0.0	10.5	33.3	10.0	6.3	33.3	0.0	0.0	9.7			
100-499	25.0	30.4	8.6	16.3	13.3	13.2	11.1	26.7	12.7	4.8	0.0	0.0	15.1			
500-1,000	8.9	4.3	10.0	7.0	6.7	18.4	0.0	16.7	11.1	4.8	11.1	0.0	9.7			
More than 1,000	14.3	0.0	14.3	20.9	20.0	15.8	55.6	13.3	4.8	0.0	77.8	38.5	15.4			

[a] Variables included under Professional Assistance Available are those variables forming the seventh of nine a priori variable sets used during data reduction.

[b] Percentages are based on non-weighted data and estimate the relative number of institutions in each cell.

[c] Row percentages are based upon 390 institutions as a result of data reduction techniques and clustering procedures.

NOTE: All entries and calculations are based on non-weighted data.

Table H.8
Percentage of Problems and Resolutions by Cluster

	CLUSTER															
PROBLEMS AND RESOLUTIONS[a]	A	B	C	D	E	F	G	H	I	J	K	L	Row[c] %	Chi Square	P Value	C Value
VA related problems	44.6[b]	39.1	78.6	58.1	53.3	65.8	77.8	56.7	55.6	52.4	55.6	76.9	59.5	24.44	.011	.63
VA related resolutions	23.2	13.0	52.9	48.8	33.3	44.7	55.6	10.0	33.3	38.1	33.3	53.8	36.7	34.26	.000	.46
OVA related problems	62.5	52.2	37.1	44.2	33.3	34.2	44.4	33.3	25.4	38.1	55.6	53.8	41.0	22.44	.021	.57
OVA Related resolutions	55.4	26.1	22.9	32.6	13.3	28.9	22.2	26.7	17.5	19.0	55.6	23.1	29.0	31.01	.001	.33
Other problems	17.9	47.8	4.3	79.1	33.3	28.9	11.1	26.7	15.9	19.0	33.3	0.0	25.6	98.93	.000	.21
Other resolutions	8.9	8.7	0.0	62.8	0.0	10.5	0.0	6.7	4.8	0.0	11.1	0.0	11.3	134.06	.000	.33
OVA office and staff	19.6	17.4	20.0	34.9	46.7	34.2	11.1	30.0	20.6	4.8	33.3	38.5	24.6	18.52	.070	.43
Qualities of OVA	46.4	34.8	48.6	48.8	40.0	55.3	11.1	66.7	33.3	33.3	22.2	53.8	44.6	20.19	.043	.30
Outside agencies	16.1	21.7	12.9	14.0	26.7	18.4	0.0	23.3	12.7	23.8	23.3	23.1	16.9	8.87	.634	.17
OVA basic services	25.0	17.4	32.9	51.2	60.0	42.1	55.6	30.0	17.5	28.6	33.3	38.5	32.6	26.52	.005	.16

[a] Variables included under Problems and Resolutions are those variables forming the eighth of nine *a priori* variable sets used during data reduction.

[b] Percentages are based on non-weighted data and estimate the relative number of institutions in each cell.

[c] Row percentages are based upon 390 institutions as a result of data reduction techniques and clustering procedures.

NOTE: All entries and calculations are based on non-weighted data.

Table H.9
Percentage of Qualifications and Responsibilities by Cluster

COORDINATOR'S QUALIFICATIONS AND RESPONSIBILITIES[a]	CLUSTER												Row[c] %[c]	Chi Square	P Value	G Value
	A	B	C	D	E	F	G	H	I	J	K	L				
Educational Level														81.37	.000	.94
No response	37.5[b]	17.4	37.1	18.6	13.3	2.6	0.0	3.3	33.3	19.0	11.1	7.7	23.1			
Less than BA	19.6	30.4	5.7	18.6	0.0	7.9	22.2	13.3	12.7	9.5	11.1	15.4	13.3			
Bachelors	26.8	34.8	18.6	30.2	40.0	36.8	22.2	26.7	23.8	28.6	33.3	15.4	26.9			
Masters	14.3	13.0	37.1	32.6	40.0	44.7	44.4	56.7	28.6	38.1	44.4	53.8	33.8			
Doctoral	1.8	4.3	1.4	0.0	6.7	7.9	11.1	0.0	1.6	4.8	0.0	7.7	2.8			
Public relations or military orientation	21.4	47.8	34.3	27.9	26.7	44.7	55.6	40.0	27.0	38.1	33.3	53.8	33.8	15.12	.177	.26
Management-administrative experience	21.4	30.4	20.0	34.9	6.7	34.2	44.6	43.3	15.9	28.6	55.6	30.8	26.7	21.66	.027	.46
Guidance or counseling experience	16.3	17.4	27.1	14.0	13.3	44.7	55.6	53.3	31.7	42.9	44.4	30.8	29.2	33.39	.000	.75
Veteran status														59.00	.003	.56
No response	28.6	4.3	20.0	7.0	33.3	5.3	0.0	6.7	33.3	33.3	11.1	0.0	18.5			
A veteran	51.8	87.0	65.7	74.4	66.7	81.6	100.0	80.0	58.7	66.7	66.7	84.6	69.0			
Not a veteran	19.6	8.7	12.9	18.6	0.0	10.5	0.0	13.3	4.8	0.0	22.2	15.4	11.5			
Response given, but not clear	0.0	0.0	1.4	0.0	0.0	2.6	0.0	0.0	3.2	0.0	0.0	0.0	1.0			
Outreach, recruitment responsibilities	17.9	52.2	31.4	23.3	33.3	34.2	33.3	20.0	17.5	19.0	11.1	38.5	26.2	18.85	.064	.30
Counseling responsibilities	51.8	47.8	37.1	46.5	33.3	57.9	33.3	53.3	30.2	42.9	22.2	46.2	43.1	14.71	.196	.21

(continued)

Table H.9 (continued)

COORDINATOR'S QUALIFICATIONS AND RESPONSIBILITIES[a]	CLUSTER												Row[c] %	Chi Square	P Value	G Value
	A	B	C	D	E	F	G	H	I	J	K	L				
Teaching or tutoring responsibilities	23.2[b]	47.8	40.0	51.2	40.0	23.7	33.3	13.3	15.9	33.3	33.3	23.1	30.5	28.78	.002	.20
General supervision responsibilities	16.1	34.8	27.1	30.2	33.3	44.7	11.1	23.3	17.5	19.0	55.6	46.2	26.9	21.82	.026	.67
Recruitment supervision	21.4	30.4	32.9	48.8	6.7	60.5	55.6	90.0	17.5	23.8	55.6	15.4	36.4	78.06	.000	.46
Direct outreach efforts	32.1	30.4	35.7	58.1	13.3	63.2	66.7	90.0	12.7	23.8	77.8	30.8	40.5	82.88	.000	.46
Establish special education programs	21.4	26.1	20.0	32.6	13.3	55.3	44.4	76.7	9.5	9.5	55.6	53.8	29.7	74.58	.000	.42
Counseling functions	26.8	39.1	28.6	34.9	6.7	47.4	33.3	66.7	14.3	19.0	44.4	61.5	32.3	43.23	.000	.21
Communication function	19.6	43.5	34.3	34.9	20.0	50.0	55.6	16.7	30.6	28.6	66.7	53.8	31.8	29.61	.002	.14
Liaison activities	12.5	39.1	37.1	48.8	26.7	39.5	55.6	13.3	25.4	23.8	55.6	46.2	31.5	30.65	.001	.51
Plan and implement program	25.0	39.1	38.6	46.5	46.46.750.0		33.3	43.3	28.6	14.3	44.4	46.2	36.7	16.46	.125	.29
Program management	48.2	60.9	44.3	51.2	46.7	57.9	33.3	26.7	36.5	19.0	77.8	61.5	45.1	23.27	.016	.59
Coordinate services	16.1	26.1	25.7	16.3	40.0	28.9	55.6	16.7	14.3	19.0	11.1	30.8	21.8	16.65	.118	.12

[a] Variables included under Coordinator's Qualifications and Responsibilities are those variables forming the ninth of nine a priori variable sets used during data reduction.

[b] Percentages are based on non-weighted data and estimate the relative number of institutions in each cell.

[c] Row percentages are based upon 390 institutions as a result of data reduction techniques and clustering procedures.

NOTE: All entries and calculations are based on non-weighted data.

Table H.10

Standardized Factor Score Means By Cluster

FACTORS	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
				CLUSTER A		
Cost	56	-0.27601857	0.64673971	-2.00765000	1.77131000	0.08642425
Size	56	-0.16812321	0.61241640	-1.21659000	2.29553000	0.08183758
Number of Category I Veterans (April)	56	-0.39450357	0.34274749	-0.88802000	0.49318000	0.04580156
Number of Category II Veterans (April)	56	-0.26814268	0.34606913	-0.54600000	1.27510000	0.04624583
VCIP expenditures and obligations	56	-0.44399000	0.41142705	-1.38624000	0.56525000	0.05497931
Non-VCIP expenditures and obligations	56	0.14709250	0.90668535	-0.54239000	3.46294000	0.12116093
Counseling and outreach services	56	-0.22777406	0.70568784	-1.13669000	3.55258000	0.09430150
OVA persons versus coordinators	56	-0.10274732	0.91209769	-2.07530000	1.20439000	0.12188417
OVA support services	56	-0.31657107	0.58496537	-1.07977000	1.21300000	0.07816929
Recruitment	56	0.17559786	1.27581833	-0.43946000	6.95213000	0.17048840
Media recruitment efforts	56	0.11546786	0.85086140	-1.39317000	1.97576000	0.11370114
Personal recruitment efforts	56	0.30417429	0.87532078	-1.07787000	1.72806000	0.11696966
Outreach and identification	56	-0.02279679	0.67170401	-1.27275000	1.60077000	0.08976028
Cognitive remedial services	56	0.63248393	0.94004583	-0.90664000	1.64358000	0.12561885
Affective remedial services	56	-0.03350875	0.68859368	-1.36170000	1.90285000	0.09201720
Specific counseling	56	0.30767804	0.78140196	-1.90528000	0.83538000	0.10441923
General counseling	56	-0.02054030	0.69148678	-0.86102000	1.88364000	0.09240381
OVA problems and resolutions	56	0.38689196	0.92498320	-1.01153000	1.77442000	0.12360608
VA problems and resolutions	56	-0.29712821	0.82700679	-1.11646000	1.29874000	0.11051343
Other problems	56	-0.14217750	0.81415507	-0.64297000	2.34924000	0.10879605
Project activities orientation	56	-0.29913018	0.66550175	-1.08021000	1.61729000	0.11565754
Management and coordination	56	-0.32471696	0.62120631	-1.21213000	1.46763000	0.08301218
Educational level and experience	56	-0.44546536	0.73012460	-1.40075000	1.34661000	0.09756700
				CLUSTER B		
Cost	23	0.08550783	0.59300327	-0.73872000	1.72088000	0.12365807
Size	23	-0.36194304	0.64489248	-1.33023000	1.48466000	0.13446939
Number of Category I Veterans (April)	23	-0.42103739	0.35401241	-0.46871000	0.44459000	0.07361669
Number of Category II Veterans (April)	23	-0.38245522	0.15745753	-0.50492000	0.02355000	0.03283216
VCIP expenditures and obligations	23	-0.40865478	0.40511652	-0.90286000	0.66617000	0.08530669
Non-VCIP expenditures and obligations	23	-0.14734957	0.37664711	-0.88043000	1.18495000	0.07853635
Counseling and outreach services	23	-0.37605739	0.65250193	-1.18758000	2.29506000	0.13605606
OVA persons versus coordinators	23	0.40976565	0.82891138	-2.12469000	2.13523000	0.17283997
OVA support services	23	-0.31904478	0.55705983	-1.10471000	0.84913000	0.11634258
Recruitment	23	-0.20022435	0.30508505	-0.48255000	0.81025000	0.06361463
Media recruitment efforts	23	-0.00758478	0.91903607	-1.45175000	1.71334000	0.19163227
Personal recruitment efforts	23	-0.50420087	0.32875390	-0.99147000	0.39753000	0.06850930
Outreach and identification	23	-0.21957652	0.60463407	-1.08922000	1.14188000	0.12607594
Cognitive remedial services	23	-0.20819130	0.75905530	-0.70658000	1.63907000	0.15827397
Affective remedial services	23	-0.11430609	0.71443240	-1.36170000	1.41006000	0.14896945
Specific counseling	23	0.17510391	0.73361553	-1.75733000	0.88874000	0.15296941
General counseling	23	1.12810696	0.66348372	-0.24051000	1.69378000	0.13830592
OVA problems and resolutions	23	-0.06513470	0.92189987	-1.02239000	1.59694000	0.19222941
VA problems and resolutions	23	-0.41068000	0.77138326	-1.14986000	1.13672000	0.16084452
Other problems	23	0.15261300	0.91700471	-0.69677000	2.24078000	0.19122121
Project activities orientation	23	-0.03970826	0.80156753	-0.98103000	1.80657000	0.16713838
Management and coordination	23	0.34519391	0.92768437	-1.23914000	2.35835000	0.19343556
Educational level and experience	23	-0.15362670	0.78765626	-1.30662000	1.45502000	0.16423768

(continued)

Table H.10 (continued)

Standardized Factor Score Means By Cluster

CLUSTER C

FACTORS	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Cost	70	-0.21126814	0.75791135	-2.00405000	1.51298000	0.09058773
Size	70	-0.24749414	0.60392889	-1.34133000	1.56748000	0.07218331
Number of Category I Veterans (April)	70	-0.22464971	0.63894279	-0.90555000	2.63738000	0.07636827
Number of Category II Veterans (April)	70	-0.11836400	0.56729606	-0.50675000	1.95546000	0.06780485
VCIP expenditures and obligations	70	-0.21210114	0.67793659	-0.96901000	2.60488000	0.08102892
Non-VCIP expenditures and obligations	70	-0.17972214	0.42752462	-0.89818000	1.87762000	0.05109897
Counseling and outreach services	70	-0.25931829	0.77793625	-1.00093000	4.56441000	0.09298117
OVA persons versus coordinators	70	-0.05733486	0.96636907	-1.97560000	1.34551000	0.11550320
OVA support services	70	-0.01415029	0.84805818	-1.04249000	2.75519000	0.10136234
Recruitment	70	-0.12056443	0.37133159	-0.53461000	1.50068000	0.04438261
Media recruitment efforts	70	-0.28572071	0.68903742	-1.39317000	1.29930000	0.08235572
Personal recruitment efforts	70	-0.25179700	0.62611942	-1.15501000	1.53628000	0.07483558
Outreach and identification	70	-0.21543143	0.65084360	-1.79486000	1.53134000	0.07779069
Cognitive remedial services	70	-0.12280371	0.96396243	-0.91572000	1.60558000	0.11521555
Affective remedial services	70	0.29209486	0.68745651	-1.36170000	1.86551000	0.08216677
Specific counseling	70	0.26607943	0.64715791	-1.95675000	0.83822000	0.07735017
General counseling	70	-0.24358400	0.66821033	-0.74702000	1.90055000	0.07986641
OVA problems and resolutions	70	-0.07825029	0.85273602	-1.02239000	1.77442000	0.10192145
VA problems and resolutions	70	0.32223829	0.85522409	-1.14486000	1.29874000	0.10221883
Other problems	70	-0.39910943	0.27192188	-0.69677000	0.84942000	0.03250088
Project activities orientation	70	-0.10865800	0.92294279	-1.08021000	1.70508000	0.11031276
Management and coordination	70	0.05310186	0.96300742	-1.26913000	1.95583000	0.11510140
Educational level and experience	70	-0.14630229	0.89996128	-1.40594000	1.47104000	0.10756595

-------------------------- CLUSTER D --------------------------

FACTORS	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Cost	43	-0.10666512	0.90432823	-2.01520000	2.10900000	0.13790876
Size	43	0.00966814	1.00016660	-1.26252000	3.24076000	0.15252398
Number of Category I Veterans (April)	43	0.00456814	0.78473039	-0.89492000	2.61893000	0.11967026
Number of Category II Veterans (April)	43	-0.17485767	0.44882175	-0.50411000	2.01456000	0.06844468
VCIP expenditures and obligations	43	0.03191326	0.87342554	-0.78941000	2.75530000	0.13319615
Non-VCIP expenditures and obligations	43	-0.08924767	0.58690210	-0.64113000	2.24650000	0.08950173
Counseling and outreach services	43	0.02403349	0.91551140	-1.28296000	3.37151000	0.13961419
OVA persons versus coordinators	43	0.05956977	1.02263930	-1.78965000	2.24415000	0.15595103
OVA support services	43	-0.10560512	0.78638986	-1.05310000	1.87292000	0.11992333
Recruitment	43	-0.06797070	0.59712592	-0.48832000	1.90169000	0.09106085
Media recruitment efforts	43	0.27114651	0.74501726	-1.25842000	2.15959000	0.11361407
Personal recruitment efforts	43	0.12407302	0.91172297	-1.27533000	1.42633000	0.13903645
Outreach and identification	43	0.02462349	0.77384229	-1.55166000	1.71364000	0.11800984
Cognitive remedial services	43	-0.13647140	0.90421670	-0.91572000	1.59332000	0.13789175
Affective remedial services	43	-0.29760209	0.65351420	-1.36170000	1.12694000	0.09965998
Specific counseling	43	-0.19656907	1.11669402	-1.95675000	0.80372000	0.17029425
General counseling	43	-0.34357395	0.59769629	-1.05503000	1.89040000	0.09117863
OVA problems and resolutions	43	0.21024674	1.00991673	-1.01153000	1.91690000	0.15401086
VA problems and resolutions	43	0.27422023	0.99769392	-1.11646000	1.53072000	0.15214690
Other problems	43	1.50067163	1.05855440	-0.32841000	2.63118000	0.16142803
Project activities orientation	43	0.26828395	0.80121290	-1.08021000	1.72265000	0.12218382
Management and coordination	43	0.23562256	0.79379692	-1.21213000	1.72927000	0.12105290
Educational level and experience	43	-0.07232628	0.92203256	-1.40075000	1.42645000	0.11024618

Table H.10 (continued)

Standardized Factor Score Means By Cluster

CLUSTER E

FACTORS	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Cost	15	0.69211133	1.06831595	-0.75085000	3.42310000	0.27563799
Size	15	2.39099400	1.15719189	0.81693000	4.70487000	0.29878566
Number of Category I Veterans (April)	15	0.60789533	1.21453367	-0.34083000	4.29601000	0.31359125
Number of Category II Veterans (April)	15	0.13640600	0.57723788	-0.46529000	1.21112000	0.14904217
VCIP expenditures and obligations	15	0.63639667	1.22975213	-0.56374000	3.78674000	0.31752064
Non-VCIP expenditures and obligations	15	0.37543000	1.05339289	-1.11592000	2.91102000	0.27198487
Counseling and outreach services	15	0.54625133	1.01883810	-0.65950000	3.07564000	0.26306287
OVA persons versus coordinators	15	-0.04936733	1.08539717	-2.30620000	1.03331000	0.28024834
OVA support services	15	0.46838067	0.65561829	-0.62796000	1.69927000	0.16927888
Recruitment	15	0.61322067	1.34524925	-0.45687000	4.06298000	0.34734186
Media recruitment efforts	15	0.33222667	0.76036880	-0.73809000	1.61786000	0.19632535
Personal recruitment efforts	15	0.12862667	0.98166845	-0.99851000	1.82219000	0.25346570
Outreach and identification	15	0.19161867	0.87339969	-1.02674000	1.62735000	0.22551083
Cognitive remedial services	15	-0.63102200	0.61986337	-0.91579000	1.53991000	0.16004803
Affective remedial services	15	0.39883800	0.62026610	-0.61342000	1.82260000	0.16015202
Specific counseling	15	0.59556400	0.30707624	-0.21457000	0.91627000	0.07928674
General counseling	15	0.05801933	0.98218740	-0.77918000	1.88364000	0.25359971
OVA problems and resolutions	15	-0.17818267	0.74813732	-1.02239000	1.45140000	0.19316823
VA problems and resolutions	15	-0.06454333	0.98427347	-1.14486000	1.27989000	0.25413832
Other problems	15	-0.06170200	0.53697542	-0.66738000	0.77810000	0.13864646
Project activities orientation	15	-0.59331800	0.53342826	-0.91980000	0.99036000	0.13772955
Management and coordination	15	0.02079267	0.72558703	-1.00372000	1.44450000	0.18734577
Educational level and experience	15	-0.03616600	0.64461558	-1.33625000	0.78192000	0.16643903
				CLUSTER F		
Cost	38	-0.20095553	0.60122453	-1.41440000	0.91854000	0.09753150
Size	38	0.12328658	0.75751131	-1.46682000	2.38251000	0.12288456
Number of Category I Veterans (April)	38	0.11881816	0.70596406	-0.85957000	2.03527000	0.11452249
Number of Category II Veterans (April)	38	0.10767263	0.73320547	-0.48552000	2.64835000	0.11894163
VCIP expenditures and obligations	38	0.11077868	0.78820845	-0.76038000	2.67960000	0.12786429
Non-VCIP expenditures and obligations	38	-0.12614158	0.45326139	-0.88935000	0.92919000	0.07352871
Counseling and outreach services	38	0.03404395	0.66359447	-0.97040000	2.10547000	0.10764924
OVA persons versus coordinators	38	-0.77674079	1.27413646	-2.50154000	0.97431000	0.20669223
OVA support services	38	0.42528711	0.79250425	-0.75108000	3.05081000	0.12856117
Recruitment	38	-0.15398237	0.32317400	-0.92560000	0.71251000	0.05247441
Media recruitment efforts	38	0.15955605	0.74631244	-1.32978000	1.72813000	0.12106786
Personal recruitment efforts	38	0.49920789	0.72297433	-1.04568000	1.68348000	0.11728192
Outreach and identification	38	0.53999421	0.92595586	-1.06161000	2.09853000	0.15020988
Cognitive remedial services	38	-0.17276395	0.89714906	-0.91115000	1.62218000	0.14553680
Affective remedial services	38	0.12742921	0.74187901	-1.31879000	1.73260000	0.12034867
Specific counseling	38	0.47395553	0.43980213	-0.81716000	0.91627000	0.07134533
General counseling	38	0.43282079	0.82177120	-0.71867000	1.90055000	0.13330889
OVA problems and resolutions	38	0.01298026	0.87831571	-1.02239000	1.60935000	0.14248162
VA problems and resolutions	38	0.17851447	0.92153938	-1.14486000	1.27989000	0.14950154
Other problems	38	0.07645684	0.90977238	-0.66738000	2.39166000	0.14758456
Project activities orientation	38	0.61307579	0.87013833	-0.94763000	1.80027000	0.14115508
Management and coordination	38	0.38298053	0.82376110	-1.11163000	2.04798000	0.13363170
Educational level and experience	38	0.54379947	0.69304520	-1.02500000	1.84711000	0.11242678

Table H.10 (continued)
Standardized Factor Score Means By Cluster

FACTORS	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
				CLUSTER G		
Cost	9	-0.23712000	0.84951302	-1.93044000	0.88703000	0.28317101
Size	9	1.02696333	1.65464239	-0.97465000	3.79755000	0.55154746
Number of Category I Veterans (April)	9	1.27624778	0.86862356	-0.12748000	2.53428000	0.28954119
Number of Category II Veterans (April)	9	0.46616889	0.68231498	-0.32360000	1.69869000	0.22743833
VCIP expenditures and obligations	9	2.94805556	0.98814083	1.62677000	4.64441000	0.32938028
Non-VCIP expenditures and obligations	9	-0.51254333	0.60473357	-1.00093000	0.91457000	0.20157786
Counseling and outreach services	9	-0.24457111	0.62620973	-1.20721000	0.67404000	0.20873658
OVA persons versus coordinators	9	0.31747556	0.76877772	-1.14365000	1.04798000	0.25625924
OVA support services	9	0.63044000	0.77718975	-0.80409000	1.52841000	0.25906292
Recruitment	9	-0.10367000	0.51216216	-0.41435000	1.22422000	0.17072072
Media recruitment efforts	9	0.71023222	0.53336738	-0.07504000	1.45756000	0.17778913
Personal recruitment efforts	9	0.08388778	0.53447231	-0.59655000	0.75716000	0.17815744
Outreach and identification	9	-0.75051222	0.78196188	-1.77641000	0.48384000	0.26065396
Cognitive remedial services	9	1.06770000	0.78252154	-0.88975000	1.57045000	0.26084051
Affective remedial services	9	0.63796667	0.43397616	-0.22939000	1.20977000	0.14465872
Specific counseling	9	0.53346000	0.37102148	-0.39225000	0.91627000	0.12367389
General counseling	9	0.73949556	0.87890075	-0.65426000	1.90055000	0.29296692
OVA problems and resolutions	9	-0.05799000	0.96617868	-1.01153000	1.77442000	0.32205955
VA problems and resolutions	9	0.33011778	0.92938429	-1.11646000	1.29874000	0.30979476
Other problems	9	-0.33345111	0.36802099	-0.67236000	0.54680000	0.12267366
Project activities orientation	9	0.47366556	0.86501666	-0.84416000	1.53336000	0.28833889
Management and coordination	9	0.33629444	0.91542596	-0.97387000	1.77712000	0.30514199
Educational level and experience	9	0.54622222	0.74280892	-0.81690000	1.28807000	0.24760297
				CLUSTER H		
Cost	30	0.13168533	0.86890025	-1.32968000	2.38209000	0.15863949
Size	30	0.10265967	0.98372555	-1.47232000	2.41043000	0.17960289
Number of Category I Veterans (April)	30	-0.26757633	0.51495965	-0.79896000	1.12730000	0.09401834
Number of Category II Veterans (April)	30	-0.24447000	0.36562432	-0.49741000	0.96486000	0.06675356
VCIP expenditures and obligations	30	-0.41927333	0.42879887	-0.96901000	0.71353000	0.07828760
Non-VCIP expenditures and obligations	30	-0.04910100	0.48262591	-0.39699000	2.04400000	0.08811503
Counseling and outreach services	30	-0.30322700	0.47070747	-0.88651000	1.16867000	0.08593903
OVA persons versus coordinators	30	0.43592933	0.58207945	-1.31740000	1.12362000	0.10627268
OVA support services	30	-0.16462867	0.69509426	-1.04249000	1.66735000	0.12690627
Recruitment	30	-0.11202233	0.31360918	-0.43919000	0.96533000	0.05725694
Media recruitment efforts	30	0.28116767	0.71753279	-1.47742000	1.99503000	0.13100296
Personal recruitment efforts	30	-0.05338733	0.78956525	-0.96128000	1.79405000	0.14415423
Outreach and identification	30	-0.13733200	0.78818309	-1.49221000	1.65631000	0.14390189
Cognitive remedial services	30	-0.11958267	0.93373280	-0.91572000	1.59644000	0.17047551
Affective remedial services	30	0.07697200	0.76616226	-1.10795000	1.85994000	0.13988145
Specific counseling	30	0.34774800	0.69402910	-1.80235000	0.83822000	0.12671180
General counseling	30	-0.36344500	0.51558735	-0.73351000	1.10770000	0.09413294
OVA problems and resolutions	30	-0.13041833	0.91894903	-1.02239000	1.67493000	0.16777637
VA problems and resolutions	30	-0.29787867	0.63567558	-1.14486000	1.22298000	0.11605795
Other problems	30	-0.08816967	0.80039708	-0.67236000	2.25708000	0.14613184
Project activities orientation	30	1.06809467	0.51076912	-0.84416000	1.72732000	0.09325326
Management and coordination	30	-0.26616467	0.59497608	-0.97387000	1.13750000	0.10862727
Educational level and experience	30	0.53074533	0.81365349	-1.32847000	1.66010000	0.14855220

Table H.10 (continued)

Standardized Factor Score Means By Cluster

FACTORS	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
				CLUSTER I		
Cost	63	-0.09740381	0.77901406	-1.92166000	2.42258000	0.09814655
Size	63	-0.32157683	0.66896784	-1.68975000	1.62185000	0.08428203
Number of Category I Veterans (April)	63	-0.36486667	0.64987757	-0.89713000	2.62016000	0.08187688
Number of Category II Veterans (April)	63	-0.24462825	0.44311881	-0.69251000	1.57662000	0.05582772
VCIP expenditures and obligations	63	-0.36579984	0.67619457	-0.91577000	2.54909000	0.08519251
Non-VCIP expenditures and obligations	63	-0.14226873	0.26247063	-0.80765000	0.58481000	0.03306819
Counseling and outreach services	63	-0.37927190	0.49211989	-1.06579000	1.56550000	0.06200014
OVA persons versus coordinators	63	0.27297190	0.71367056	-1.46731000	1.03344000	0.08991404
OVA support services	63	-0.27834873	0.56756425	-0.95018000	1.79544000	0.07150637
Recruitment	63	-0.21997079	0.33390893	-0.55038000	1.94591000	0.04206857
Media recruitment efforts	63	-0.32690286	0.86448414	-1.63628000	1.61823000	0.10891476
Personal recruitment efforts	63	-0.16143841	0.75195755	-1.18637000	1.36553000	0.09473775
Outreach and identification	63	0.12916190	0.63754094	-1.10810000	2.13402000	0.08032311
Cognitive remedial services	63	-0.38703889	0.67320363	-0.90658000	1.68364000	0.08481568
Affective remedial services	63	-0.42929873	0.84865271	-1.36170000	2.05433000	0.10692019
Specific counseling	63	-1.23956333	0.78697749	-1.95675000	0.77984000	0.09915010
General counseling	63	-0.31255333	0.58584766	-1.05563000	1.70255000	0.07380987
OVA problems and resolutions	63	-0.33848095	0.83520914	-1.02239000	1.77442000	0.10522646
VA problems and resolutions	63	-0.13505714	0.92293280	-1.14486000	1.29874000	0.11627860
Other problems	63	-0.25315524	0.71776104	-0.69677000	2.39166000	0.09042939
Project activities orientation	63	-0.54953016	0.75504240	-1.08021000	1.76023000	0.09512640
Management and coordination	63	-0.40249476	0.83321460	-1.28660000	1.84063000	0.10497517
Educational level and experience	63	-0.26390317	0.85571070	-1.47286000	1.20585000	0.10780941
				CLUSTER J		
Cost	21	2.07622810	1.18362292	-0.04740000	4.71122000	0.25828770
Size	21	-1.10694619	0.56305889	-2.05006000	0.23806000	0.12286952
Number of Category I Veterans (April)	21	-0.65076810	0.21975798	-0.88806000	-0.18195000	0.04795512
Number of Category II Veterans (April)	21	-0.33156143	0.27178571	-0.50569000	0.55646000	0.05930850
VCIP expenditures and obligations	21	-0.61347762	0.24540281	-0.82720000	0.09943000	0.05355128
Non-VCIP expenditures and obligations	21	-0.02311524	0.41857240	-0.41028000	1.26104000	0.09133999
Counseling and outreach services	21	-0.52270429	0.39566826	-1.17500000	0.42900000	0.08634189
OVA persons versus coordinators	21	-0.46465429	0.82443902	-1.68246000	0.66559000	0.17990734
OVA support services	21	-0.57165048	0.32550588	-0.98663000	0.15680000	0.07103121
Recruitment	21	-0.19303429	0.34970922	-0.43936000	1.07216000	0.07631172
Media recruitment efforts	21	-0.43657000	0.71073436	-1.63628000	0.73146000	0.15509495
Personal recruitment efforts	21	-0.20671476	0.75768828	-1.37173000	1.11407000	0.16534114
Outreach and identification	21	0.29997381	0.69729709	-1.16385000	1.94822000	0.15216270
Cognitive remedial services	21	0.08758524	0.89736138	-0.93664000	1.63907000	0.19582031
Affective remedial services	21	-0.27786571	0.69777672	-1.36170000	0.95763000	0.15226736
Specific counseling	21	-0.08251667	1.00453860	-1.91173000	0.74534000	0.21920830
General counseling	21	-0.23061667	0.67386386	-1.05563000	0.95092000	0.14704915
OVA problems and resolutions	21	-0.22504810	0.81154000	-1.01153000	1.45140000	0.17709255
VA problems and resolutions	21	-0.12362857	0.94303134	-1.11646000	1.10280000	0.20578631
Other problems	21	-0.28551095	0.44404436	-0.62528000	0.71666000	0.09689842
Project activities orientation	21	-0.38710000	0.78520899	-1.08021000	1.42560000	0.17134665
Management and coordination	21	-0.28990048	0.72329936	-1.29501000	1.03896000	0.15783490
Educational level and experience	21	0.09767095	0.78941519	-1.40075000	1.27642000	0.17226450

Table H.10 (continued)

Standardized Factor Score Means By Cluster

CLUSTER K

FACTORS	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Cost	9	-0.38361333	1.01605360	-1.60978000	1.43233000	0.33868453
Size	9	0.55825333	1.03897392	-0.89884000	2.30995000	0.34632464
Number of Category I Veterans (April)	9	1.65227556	0.57523900	0.53869000	2.40321000	0.19174633
Number of Category II Veterans (April)	9	4.99526667	2.10299184	2.47885000	9.40067000	0.70099728
VCIP expenditures and obligations	9	1.35939333	0.72824124	0.01946000	2.98055000	0.24274708
Non-VCIP expenditures and obligations	9	-0.19549778	0.84425826	-0.77657000	1.75244000	0.28141942
Counseling and outreach services	9	0.58216222	0.87945990	-0.81119000	1.82378000	0.29315330
OVA persons versus coordinators	9	0.41913111	1.00920573	-1.96230000	1.06643000	0.33640191
OVA support services	9	0.96239667	0.53163856	0.28896000	2.11047000	0.17721285
Recruitment	9	0.33972222	1.14871530	-0.71736000	3.10478000	0.38290510
Media recruitment efforts	9	0.08508667	0.63667369	-0.69533000	0.88664000	0.21222456
Personal recruitment efforts	9	0.26894889	1.10410798	-1.11198000	1.81784000	0.36803599
Outreach and identification	9	-0.40943222	0.81367767	-1.35162000	0.79603000	0.27122589
Cognitive remedial services	9	0.07457222	1.03751367	-0.87309000	1.59326000	0.34583789
Affective remedial services	9	0.36314000	0.54319705	-0.42633000	1.01431000	0.18106568
Specific counseling	9	0.28739778	0.69915157	-0.96253000	0.80235000	0.23305052
General counseling	9	0.22538667	0.90248255	-0.64412000	1.83423000	0.30082752
OVA problems and resolutions	9	0.42015889	1.16820141	-0.89050000	1.68277000	0.38940047
VA problems and resolutions	9	-0.05615556	0.95017038	-1.10124000	1.22228000	0.31672346
Other problems	9	0.10775667	0.91599644	-0.65244000	2.16876000	0.30533215
Project activities orientation	9	0.68100444	0.96698812	-0.97829000	1.85032000	0.32232937
Management and coordination	9	0.54527000	0.72863842	-0.82487000	1.73951000	0.24287947
Educational level and experience	9	0.38667667	0.93864225	-1.26848000	1.69674000	0.31288075

CLUSTER L

FACTORS	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Cost	13	-0.43552308	0.56204309	-1.08622000	0.63570000	0.15588282
Size	13	1.31747154	1.44612553	-1.54135000	3.73579000	0.40108306
Number of Category I Veterans (April)	13	2.88013692	0.85436340	1.23681000	4.01594000	0.23695777
Number of Category II Veterans (April)	13	0.60056615	1.07049694	-0.36261000	3.35846000	0.29690243
VCIP expenditures and obligations	13	2.51823000	1.18207655	0.88358000	5.22938000	0.32784905
Non-VCIP expenditures and obligations	13	-0.20236846	1.21072053	-1.34280000	3.12352000	0.33579346
Counseling and outreach services	13	2.67267385	1.28001970	0.71115000	4.82675000	0.35501359
OVA persons versus coordinators	13	-0.52575769	1.51876946	-2.43599000	1.29788000	0.42123086
OVA support services	13	0.94317538	0.80646919	-0.78106000	1.42424000	0.22367431
Recruitment	13	-0.02854462	0.97348246	-1.14073000	2.49742000	0.26999546
Media recruitment efforts	13	0.19961000	0.70671087	-1.46144000	1.08690000	0.19600632
Personal recruitment efforts	13	0.05730154	0.86987103	-0.81861000	1.63288000	0.24125881
Outreach and identification	13	-1.17462000	0.60208935	-1.32726000	0.85850000	0.16698954
Cognitive remedial services	13	0.83715077	0.95448888	-0.91579000	1.61009000	0.26472758
Affective remedial services	13	0.33107615	0.79413633	-0.51077000	1.73260000	0.22025379
Specific counseling	13	0.30950534	0.72012477	-1.95675000	0.91627000	0.19972668
General counseling	13	0.00276154	0.91279982	-0.78776000	1.88364000	0.25316512
OVA problems and resolutions	13	0.12289077	0.85925080	-0.93074000	1.64959000	0.23831329
VA problems and resolutions	13	0.35324000	0.94319620	-1.06839000	1.23627000	0.26159558
Other problems	13	-0.42896462	0.17177836	-0.67236000	-0.21318000	0.04764274
Project activities orientation	13	0.11653000	0.78580516	-0.89208000	1.75641000	0.21794314
Management and coordination	13	0.49855308	0.87682304	-1.01457000	1.49589000	0.24318695
Educational level and experience	13	0.13323154	0.73076838	-0.94347000	1.39327000	0.20267868

Table H.11

Variable Means for All Institutions (Zero Values Are Included)[a]

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Total undergraduate student enrollment	390[b]	4004.4790872	5012.8905036	76.00000000	36084.000000	253.83757780
Total undergraduate veterans enrolled	390	801.4461538	891.3585229	27.00000000	5380.000000	45.13569332
Number of Category I veterans (April)	390	666.3032051	712.4471806	16.00000000	3924.000000	36.07616534
Number of Category II veterans (April)	390	61.8000000	143.0613321	0.00000000	1389.000000	7.24419214
Average annual per capita inst. expend.	390	1001.2820513	489.2552101	0.00000000	2800.000000	24.77440059
Total VCIP award	390	24662.0058974	25744.3710938	4105.86000000	135000.000000	1303.61690437
Non-VCIP funds	390	9922.1133333	16845.1086744	0.00000000	125775.000000	852.98523487
VCIP OVA expenditures and obligations	390	21949.1810769	22027.6051532	0.00000000	129591.000000	1115.41114506
Non-VCIP expenditures and obligations	390	9922.1133333	16845.1086744	0.00000000	125775.000000	852.98523487
VCIP funds for personal services	390	16960.1889744	17333.5423094	0.00000000	114621.260000	877.71803339
Non-VCIP funds for personal services	390	7252.0100256	12343.6780031	0.00000000	95875.000000	625.04643242
VCIP funds for indirect services	390	4988.9921026	6224.1932249	0.00000000	44515.190000	315.17427536
Non-VCIP funds for indirect services	390	2670.1033077	7416.5030710	0.00000000	70988.670000	375.54923130
Number of OVA persons	390	0.6784615	0.4670068	0.00000000	1.000000	0.02364781
Funds for OVA persons	390	7060.3771282	6080.3709358	0.00000000	29320.360000	307.89155066
Number of coordinators	390	0.3298718	0.5161980	0.00000000	5.000000	0.02613870
Funds for coordinators	390	3417.3512564	5228.8016630	0.00000000	21880.340000	264.77066436
Number of counselors	390	0.4201538	0.8713763	0.00000000	6.750000	0.04412385
Funds for counselors	390	3713.6416154	7487.9883946	0.00000000	72421.360000	379.16903138
Number of outreach workers	390	0.3295897	0.9380398	0.00000000	8.500000	0.04749949
Funds for outreach workers	390	1306.8178718	3219.7762307	0.00000000	21931.400000	163.03970710
Number of recruiters	390	0.1722308	0.5932954	0.00000000	7.250000	0.03004268
Funds for recruiters	390	1027.5127692	3470.1206381	0.00000000	39275.000000	175.71638894
Number of secretaries	390	0.5086923	0.5764786	0.00000000	3.000000	0.02919113
Funds for secretaries	390	3151.5250256	3708.3757497	0.00000000	21423.000000	187.78090548
Number of clerks	390	0.4642821	1.0159167	0.00000000	7.100000	0.05144294
Funds for clerks	390	2489.2614615	6081.2903785	0.00000000	44404.910000	307.93810845
Total number of OVA staff	390	2.9504359	2.6905923	0.00000000	26.750000	0.13624344
Total funds for OVA staff	390	22393.6898974	19286.5686055	0.00000000	123045.600000	976.61336414

NOTE: All entries and calculations are based on non-weighted data.

[a] For most variables it was not possible to distinguish between missing data and "true" zero values.

[b] Data was included for 390 institutions as the result of data reduction techniques and clustering procedures.

Table H.12

Variable Means for All Institutions (Zero Values Are Not Included)[a]

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Total undergraduate student enrollment	390[b]	6694,4794872	5012,9905034	74,0000000	30880,000000	253,83757700
Total undergraduate veterans enrolled	390	881,9461538	891,3545229	27,0000000	5390,000000	45,13569332
Number of Category I veterans (April)	390	666,3032051	712,9071800	16,0000000	3926,000000	36,07610530
Number of Category II veterans (April)	287	83,3979239	160,7375874	0,7500000	1349,000000	9,45515220
Average annual per capita inst. expend.	383	1019,5822458	474,3939676	122,0000000	2900,000000	24,24039938
Total VCIP award	390	24942,0058974	25794,3710938	4105,9600000	135000,000000	1306,16900437
Non-VCIP funds	289	13389,7031142	18348,8069757	41,2600000	125775,000000	1079,34158081
VCIP OVA expenditures and obligations	387	22119,3297674	22027,5507361	2085,6000000	129571,000000	1119,72353500
Non-VCIP expenditures and obligations	289	13389,7031142	18348,8069757	41,2600000	125775,000000	1079,34158081
VCIP funds for personal services	383	17270,1663185	17337,5307900	426,9800000	114621,260000	885,90041922
Non-VCIP funds for personal services	251	11268,0633865	13843,6948083	91,9100000	95875,000000	873,80039411
VCIP funds for indirect services	349	5575,0914613	6320,7004765	9,9500000	40515,190000	338,66372383
Non-VCIP funds for indirect services	249	4182,6895181	8940,2734285	10,3900000	70900,670000	566,56600700
Number of OVA persons	265	0,9984906	0,0245718	0,6000000	1,000000	0,00150943
Funds for OVA persons	264	10030,1025758	4404,8820185	2232,1100000	29320,360000	271,10170455
Number of coordinators	159	0,8691195	0,5155670	0,0100000	5,000000	0,04088712
Funds for coordinators	159	8382,1823270	5043,1302672	550,0000000	21080,340000	399,94624554
Number of counselors	155	1,0571613	1,1130207	0,0200000	6,750000	0,08940089
Funds for counselors	157	9224,9806178	9415,2939036	57,0000000	72421,360000	751,42220090
Number of outreach workers	119	1,0401681	1,4433042	0,0100000	8,500000	0,13230768
Funds for outreach workers	119	4282,8404874	4617,5662599	147,0000000	21951,000000	423,29160504
Number of recruiters	78	0,8611538	1,0850387	0,0100000	7,250000	0,12285664
Funds for recruiters	80	5069,1287500	6252,7911515	60,0000000	39275,000000	699,08210516
Number of secretaries	234	0,8878205	0,5150250	0,0200000	3,000000	0,03372059
Funds for secretaries	239	5164,2030975	3491,3507339	113,0000000	21923,000000	225,79235090
Number of clerks	150	1,2071333	1,3385700	0,0100000	7,100000	0,10929378
Funds for clerks	153	6345,1762745	8367,6683020	116,0000000	44408,910000	676,48027036
Total number of OVA staff	386	2,4810104	2,6875864	0,2000000	26,750000	0,13679455
Total funds for OVA staff	386	22075,7488601	19250,2525806	2209,9800000	123005,000000	979,81205024

NOTE: All entries and calculations are based on non-weighted data.

[a] For most variables it was not possible to distinguish between missing data and "true" zero values.

[b] Data was included for 390 institutions as the result of data reduction techniques and clustering procedures.

Table H.13

Variable Means By Cluster

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
				CLUSTER A		
Total undergraduate enrollment	56	2891.4821429	2710.0819117	169.00000000	13899.000000	362.14458348
Undergraduate veterans enrolled	56	471.0357143	295.5695866	29.00000000	1174.000000	39.49714739
Number of Category I veterans (April)	56	398.4151786	259.4684618	25.50000000	1069.000000	34.67293161
Number of Category II veterans (April)	56	28.0000000	48.4312500	0.00000000	210.000000	6.47189855
Average annual per capita inst. expend.	56	842.7678571	353.7279381	0.00000000	1914.000000	47.26888402
Total VCIP award	56	16641.9107143	9139.4681152	5456.00000000	38126.000000	1221.31279944
Non-VCIP funds	56	14983.6921429	26618.3388132	0.00000000	125775.000000	3557.02514443
VCIP OVA expenditures and obligations	56	13349.1508929	8667.4429014	0.00000000	36489.070000	1158.23577701
Non-VCIP OVA expenditures and obligations	56	14983.6921429	26618.3388132	0.00000000	125775.000000	3557.02514443
Institutional share of award	56	660.1512500	1560.7424500	0.00000000	6616.000000	208.56298328
Total FTE personnel for the OVA	56	2.5078571	2.0463343	0.00000000	11.500000	0.27346629
Total VCIP funds for the OVA staff	56	9765.1228571	6598.3245599	0.00000000	29070.050000	881.73820821
Total funds for the OVA staff	56	18929.7114286	16171.8968877	0.00000000	91509.000000	2161.05982270
Outreach and recruitment	56	1.0000000	0.0000000	1.00000000	1.000000	0.00000000
Available services	56	0.9642857	0.1872563	0.00000000	1.000000	0.02502318
Professional assistance	56	1.0000000	0.0000000	1.00000000	1.000000	0.00000000
Problems and resolutions	56	1.0000000	0.0000000	1.00000000	1.000000	0.00000000
Coordinators qualifications	56	0.9642857	0.1872563	0.00000000	1.000000	0.02502318
				CLUSTER B		
Total undergraduate enrollment	23	2878.6956522	2784.9258026	299.00000000	11862.0000000	580.69718926
Undergraduate veterans enrolled	23	453.4347826	335.8074159	51.00000000	1286.0000000	70.02068656
Number of Category I veterans (April)	23	388.3695652	272.5105072	48.25000000	1079.2500000	56.82236873
Number of Category II veterans (April)	23	13.1739130	21.1011418	0.00000000	73.0000000	4.39989205
Average annual per capita inst. expend.	23	1040.4782609	348.2192198	487.00000000	2065.0000000	72.60872642
Total VCIP award	23	10178.7826087	9152.8541114	5456.00000000	38542.0000000	1908.50242902
Non-VCIP funds	23	7017.7443478	11136.4222429	0.00000000	48035.3900000	2322.10456284
VCIP OVA expenditures and obligations	23	13122.5086957	7873.0708427	5059.97000000	28846.5500000	1641.64875359
Non-VCIP OVA expenditures and obligations	23	7017.7443478	11136.4222429	0.00000000	48035.3900000	2322.10456284
Institutional share of award	23	588.7078261	1612.4745779	0.00000000	7011.4400000	336.22419179
Total FTE personnel for the OVA	23	1.7869565	1.4515961	0.46000000	7.6400000	0.30267871
Total VCIP funds for the OVA staff	23	9583.1352174	5086.3701170	3808.00000000	19100.1400000	1060.58336145
Total funds for the OVA staff	23	14794.8217391	12008.9286765	3808.00000000	65095.5100000	2507.44049205
Outreach and recruitment	23	1.0000000	0.0000000	1.00000000	1.0000000	0.00000000
Available services	23	0.9130435	0.2881041	0.00000000	1.0000000	0.06007385
Professional assistance	23	1.0000000	0.0000000	1.00000000	1.0000000	0.00000000
Problems and resolutions	23	0.9130435	0.2881041	0.00000000	1.0000000	0.06007385
Coordinators qualifications	23	1.0000000	0.0000000	1.00000000	1.0000000	0.00000000

(continued)

Table H.13 (continued)

Variable Means By Cluster

CLUSTER C

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Total undergraduate enrollment	70	3127.9571429	2779.1253521	155.00000000	12433.000000	332.16901298
Undergraduate veterans enrolled	70	617.8428571	565.3266205	33.00000000	3104.000000	67.56945552
Number of Category I veterans (April)	70	526.8892857	486.1074530	18.75000000	2765.000000	58.10095350
Number of Category II veterans (April)	70	47.9750000	80.6347570	0.00000000	337.000000	9.63769685
Average annual per capita inst. expend.	70	904.0714286	425.5455602	0.00000000	2281.000000	50.86242281
Total VCIP award	70	19776.0078571	17522.1106414	5456.00000000	102465.000000	2094.29279345
Non-VCIP funds	70	6619.9664286	10901.2359838	0.00000000	62512.000000	1302.94691249
VCIP OVA expenditures and obligations	70	18306.1004286	16228.3341985	0.00000000	93022.000000	1939.65693159
Non-VCIP OVA expenditures and obligations	70	6619.9664286	10901.2359838	0.00000000	62512.000000	1302.94691249
Institutional share of award	70	1082.5075714	2574.7135130	0.00000000	10402.000000	307.73712516
Total FTE personnel for the OVA	70	2.3385714	1.6493286	0.00000000	7.500000	0.19713247
Total VCIP funds for the OVA staff	70	13659.3897143	11449.8611303	0.00000000	57028.000000	1368.52015958
Total funds for the OVA staff	70	19279.6061429	13105.5821183	0.00000000	57028.000000	1566.41666898
Outreach and recruitment	70	1.0000000	0.0000000	1.00000000	1.000000	0.00000000
Available services	70	0.9857143	0.1195229	0.00000000	1.000000	0.01428571
Professional assistance	70	1.0000000	0.0000000	1.00000000	1.000000	0.00000000
Problems and resolutions	70	0.9714286	0.1678015	0.00000000	1.000000	0.02005612
Coordinators qualifications	70	0.9571429	0.2039973	0.00000000	1.000000	0.02438234

CLUSTER D

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Total undergraduate enrollment	43	4531.5116279	4803.0009536	210.00000000	23530.000000	732.45077873
Undergraduate veterans enrolled	43	881.0465116	741.2952934	32.00000000	3116.000000	113.04647244
Number of Category I veterans (April)	43	703.9302326	608.4263106	31.50000000	2717.000000	92.78414251
Number of Category II veterans (April)	43	38.6511628	69.8080732	0.00000000	396.000000	10.64563136
Average annual per capita inst. expend.	43	955.1395349	464.1661536	0.00000000	2209.000000	70.78467482
Total VCIP award	43	25996.9534884	21486.6839405	5456.00000000	97669.000000	3276.68858212
Non-VCIP funds	43	9664.7646512	18491.0511569	0.00000000	97324.000000	2819.85886538
VCIP OVA expenditures and obligations	43	22728.2872093	18519.1475527	5456.00000000	83639.150000	2824.14352557
Non-VCIP OVA expenditures and obligations	43	9664.7646512	18491.0511569	0.00000000	97324.000000	2819.85886538
Institutional share of award	43	2482.3190698	4518.6647502	0.00000000	23332.000000	689.08991421
Total FTE personnel for the OVA	43	2.9004651	2.5284820	0.50000000	11.770000	0.38566003
Total VCIP funds for the OVA staff	43	15693.6874419	11241.8903570	3300.00000000	50425.000000	1714.37220728
Total funds for the OVA staff	43	22311.5100000	21199.3011692	3300.00000000	123945.600000	3232.86312035
Outreach and recruitment	43	1.0000000	0.0000000	1.00000000	1.000000	0.00000000
Available services	43	0.9534884	0.2130826	0.00000000	1.000000	0.03249480
Professional assistance	43	0.9767442	0.1524986	0.00000000	1.000000	0.02325581
Problems and resolutions	43	1.0000000	0.0000000	1.00000000	1.000000	0.00000000
Coordinators qualifications	43	0.9767442	0.1524986	0.00000000	1.000000	0.02325581

Table H.13 (continued)

Variable Means By Cluster

CLUSTER E

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Total undergraduate enrollment	15	15795.8666667	5888.3839023	7875.0000000	30884.000000	1520.37418598
Undergraduate veterans enrolled	15	1933.3333333	1271.8562175	476.0000000	5380.000000	328.39186329
Number of Category I veterans (April)	15	1170.9833333	916.5796010	468.7500000	3924.000000	236.65983533
Number of Category II veterans (April)	15	70.4333333	87.6478581	0.0000000	258.000000	22.63057964
Average annual per capita inst. expend.	15	1387.6000000	544.3033293	691.0000000	2636.000000	140.53851531
Total VCIP award	15	32164.0000000	31442.5474681	16756.0000000	135000.000000	8118.43084709
Non-VCIP funds	15	24129.0186667	28330.0415529	0.0000000	94258.840000	7314.78527545
VCIP OVA expenditures and obligations	15	36787.0120000	24264.9959017	15365.0000000	106533.820000	6265.19500153
Non-VCIP OVA expenditures and obligations	15	24129.0186667	28330.0415529	0.0000000	94258.840000	7314.78527545
Institutional share of award	15	4726.9920000	8100.1365181	0.0000000	28312.770000	2091.44625578
Total FTE personnel for the OVA	15	7.2033333	6.3765829	1.3900000	26.750000	1.64642663
Total VCIP funds for the OVA staff	15	24294.1840000	13788.0035434	10834.5300000	61499.500000	3560.04720673
Total funds for the OVA staff	15	43081.3286667	26888.3245345	15238.0800000	121731.880000	6942.53554198
Outreach and recruitment	15	1.0000000	0.0000000	1.0000000	1.000000	0.00000000
Available services	15	1.0000000	0.0000000	1.0000000	1.000000	0.00000000
Professional assistance	15	1.0000000	0.0000000	1.0000000	1.000000	0.00000000
Problems and resolutions	15	0.9333333	0.2581989	0.0000000	1.000000	0.06666667
Coordinators qualifications	15	1.0000000	0.0000000	1.0000000	1.000000	0.00000000

CLUSTER F

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Total undergraduate enrollment	38	4931.8684211	3211.6663282	406.00000000	13950.0000000	521.00107596
Undergraduate veterans enrolled	38	938.3947368	653.1133149	51.00000000	2794.0000000	105.94897011
Number of Category I veterans (April)	38	784.8223684	528.2172398	41.00000000	2174.0000000	85.68815130
Number of Category II veterans (April)	38	73.0000000	88.8220587	0.00000000	401.0000000	14.40884059
Average annual per capita inst. expend.	38	893.8421053	323.4463510	298.00000000	1589.0000000	52.46992672
Total VCIP award	38	29007.8947368	19304.0782077	5456.00000000	84057.0000000	3131.53500047
Non-VCIP funds	38	9561.1718421	11694.4963797	0.00000000	42404.0000000	1897.09782212
VCIP OVA expenditures and obligations	38	25642.3184211	16460.5987215	4200.00000000	73810.8200000	2670.26106838
Non-VCIP OVA expenditures and obligations	38	9561.1718421	11694.4963797	0.00000000	42404.0000000	1897.09782212
Institutional share of award	38	2483.2594737	4321.9430722	0.00000000	26114.0000000	701.11175046
Total FTE personnel for the OVA	38	3.6292105	2.4355069	1.00000000	11.5000000	0.39509139
Total VCIP funds for the OVA staff	38	19962.5039474	11925.6107499	4000.00000000	57278.6100000	1934.58952371
Total funds for the OVA staff	38	27235.7207895	15364.0286134	7880.03000000	71579.0000000	2492.37455595
Outreach and recruitment	38	1.0000000	0.0000000	1.00000000	1.0000000	0.00000000
Available services	38	1.0000000	0.0000000	1.00000000	1.0000000	0.00000000
Professional assistance	38	1.0000000	0.0000000	1.00000000	1.0000000	0.00000000
Problems and resolutions	38	0.9736842	0.1622214	0.00000000	1.0000000	0.02631579
Coordinators qualifications	38	1.0000000	0.0000000	1.00000000	1.0000000	0.00000000

Table H.13 (continued)

Variable Means By Cluster

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
				CLUSTER G		
Total undergraduate enrollment	9	10109.0000000	7791.3798361	676.0000000	25010.0000000	2597,12661203
Undergraduate veterans enrolled	9	1968.8888889	915.8966160	663.0000000	3670.0000000	305,29887196
Number of Category I veterans (April)	9	1698.5000000	712.4039957	617.0000000	2780.5000000	237,46799858
Number of Category II veterans (April)	9	121.2222222	115.0041062	9.0000000	351.0000000	38,33470207
Average annual per capita inst. expend.	9	891.3333333	447.1887186	0.0000000	1452.0000000	149,06290618
Total VCIP award	9	61434.0000000	24130.2842503	22037.0000000	96799.0000000	8043,42808343
Non-VCIP funds	9	10543.6566667	18212.1949464	0.0000000	51611.5000000	6070,73164881
VCIP OVA expenditures and obligations	9	51826.4355556	19796.6651217	19192.9000000	86614.9700000	6598,88837390
Non-VCIP OVA expenditures and obligations	9	10543.6566667	18212.1949464	0.0000000	51611.5000000	6070,73164881
Institutional share of award	9	7409.9855556	7917.3727521	0.0000000	24199.0000000	2639,12425071
Total FTE personnel for the OVA	9	4.2688889	3.5544073	0.5000000	13.0000000	1,18480243
Total VCIP funds for the OVA staff	9	24617.3544444	9926.4753108	3626.1200000	37572.4500000	3308,82510358
Total funds for the OVA staff	9	32709.2988889	19143.3761708	3626.1200000	71852.6600000	6381,12539027
Outreach and recruitment	9	1.0000000	0.0000000	1.0000000	1.0000000	0,00000000
Available services	9	1.0000000	0.0000000	1.0000000	1.0000000	0,00000000
Professional assistance	9	1.0000000	0.0000000	1.0000000	1.0000000	0,00000000
Problems and resolutions	9	1.0000000	0.0000000	1.0000000	1.0000000	0,00000000
Coordinators qualifications	9	1.0000000	0.0000000	1.0000000	1.0000000	0,00000000
				CLUSTER H		
Total undergraduate enrollment	30	4717.8666667	4321.7138342	547.00000000	14961.0000000	789,03338468
Undergraduate veterans enrolled	30	593.5666667	488.9637659	109.00000000	1973.0000000	89,27216146
Number of Category I veterans (April)	30	493.0750000	397.0369627	103.00000000	1583.5000000	72,48870022
Number of Category II veterans (April)	30	32.3666667	52.0490374	0.00000000	202.7500000	9,50281063
Average annual per capita inst. expend.	30	1060.9666667	439.9332617	370.00000000	2213.0000000	80,32045707
Total VCIP award	30	18018.9666667	14344.8683293	5456.00000000	57388.0000000	2618,92962646
Non-VCIP funds	30	8344.7140000	13186.1980195	0.00000000	65323.6100000	2407,45936767
VCIP OVA expenditures and obligations	30	14789.9753333	11221.2990315	0.00000000	43041.0000000	2048,71953470
Non-VCIP OVA expenditures and obligations	30	8344.7140000	13186.1980195	0.00000000	65323.6100000	2407,45936767
Institutional share of award	30	1300.1713333	3175.1072703	0.00000000	14347.0000000	579,69262482
Total FTE personnel for the OVA	30	2.0666667	2.3011681	0.00000000	9.5000000	0,42013390
Total VCIP funds for the OVA staff	30	11179.1313333	8725.2229733	0.00000000	35453.0000000	1593,00048059
Total funds for the OVA staff	30	17328.2776667	13640.9074912	0.00000000	64188.1000000	2490,47757925
Outreach and recruitment	30	1.0000000	0.0000000	1.00000000	1.0000000	0,00000000
Available services	30	1.0000000	0.0000000	1.00000000	1.0000000	0,00000000
Professional assistance	30	1.0000000	0.0000000	1.00000000	1.0000000	0,00000000
Problems and resolutions	30	0.9666667	0.1825742	0.00000000	1.0000000	0,03333333
Coordinators qualifications	30	1.0000000	0.0000000	1.00000000	1.0000000	0,00000000

Table H.13 (continued)

Variable Means By Cluster

CLUSTER I

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Total undergraduate enrollment	63	2909.8730159	2932.6614715	76.00000000	13900.0000000	369.48061586
Undergraduate veterans enrolled	63	515.9841270	623.4399754	27.00000000	3463.0000000	78.54605392
Number of Category I veterans (April)	63	424.7063492	502.9613724	26.00000000	2716.2500000	63.36717039
Number of Category II veterans (April)	63	35.1388889	63.4115268	0.00000000	259.0000000	7.98910143
Average annual per capita inst. expend.	63	963.5238095	445.0349699	0.00000000	2323.0000000	56.06913595
Total VCIP award	63	16161.9047619	17623.0701068	5456.00000000	98363.0000000	2220.29813525
Non-VCIP funds	63	6932.8298413	6766.7463204	0.00000000	24250.0000000	852.52990232
VCIP OVA expenditures and obligations	63	14395.7514286	13268.7838592	3428.00000000	77067.5100000	1671.70963293
Non-VCIP OVA expenditures and obligations	63	6932.8298413	6766.7463204	0.00000000	24250.0000000	852.52990232
Institutional share of award	63	1075.7536508	3582.8392118	0.00000000	21275.4900000	451.39531152
Total FTE personnel for the OVA	63	2.1095238	1.4305181	1.00000000	8.0000000	0.18022834
Total VCIP funds for the OVA staff	63	11034.7082540	8812.9195320	2300.00000000	48991.0100000	1110.32349553
Total funds for the OVA staff	63	15802.0723810	10643.6352572	4100.00000000	63156.8600000	1340.97199696
Outreach and recruitment	63	0.9365079	0.2458085	0.00000000	1.0000000	0.03096846
Available services	63	0.8253968	0.3826766	0.00000000	1.0000000	0.04821272
Professional assistance	63	0.9047619	0.2959013	0.00000000	1.0000000	0.03728006
Problems and resolutions	63	0.8571429	0.3527378	0.00000000	1.0000000	0.04444079
Coordinators qualifications	63	0.8888889	0.3167940	0.00000000	1.0000000	0.03991229

CLUSTER J

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
Total undergraduate enrollment	21	1782.7619048	2148.6120149	103.00000000	8563.0000000	468.86558082
Undergraduate veterans enrolled	21	247.9523810	197.3401825	35.00000000	590.0000000	43.06315828
Number of Category I veterans (April)	21	208.4761905	169.6082017	16.00000000	549.7500000	37.01155267
Number of Category II veterans (April)	21	23.0476190	40.6776673	0.00000000	153.5000000	8.87659474
Average annual per capita inst. expend.	21	1954.8095238	562.6483466	911.00000000	2800.0000000	122.77993513
Total VCIP award	21	8932.9880952	5106.7738504	4105.86000000	20355.0000000	1114.38941555
Non-VCIP funds	21	9499.0838095	11348.0574979	0.00000000	42992.6000000	2476.34916546
VCIP OVA expenditures and obligations	21	8357.8114286	4578.4729145	2710.29000000	17576.0000000	999.10469991
Non-VCIP OVA expenditures and obligations	21	9499.0838095	11348.0574979	0.00000000	42992.6000000	2476.34916546
Institutional share of award	21	185.8190476	716.5179465	0.00000000	3251.0000000	156.35703460
Total FTE personnel for the OVA	21	1.6638095	1.2662878	0.66000000	5.9000000	0.27632665
Total VCIP funds for the OVA staff	21	6187.9195238	3522.1249922	0.00000000	12605.1300000	768.59068495
Total funds for the OVA staff	21	13300.8276190	8845.6732237	2209.98000000	39477.9700000	1930.28414860
Outreach and recruitment	21	0.9047619	0.3007926	0.00000000	1.0000000	0.06563833
Available services	21	0.9047619	0.3007926	0.00000000	1.0000000	0.06563833
Professional assistance	21	0.9523810	0.2182179	0.00000000	1.0000000	0.04761905
Problems and resolutions	21	1.0000000	0.0000000	1.00000000	1.0000000	0.00000000
Coordinators qualifications	21	0.9047619	0.3007926	0.00000000	1.0000000	0.06563833

Table H.13 (continued)

Variable Means By Cluster

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE	STD ERROR OF MEAN
				CLUSTER K		
Total undergraduate enrollment	9	9172.3333333	5225.2355049	2266.0000000	16862.0000000	1741.74519164
Undergraduate veterans enrolled	9	2028.5555556	781.0257980	883.0000000	3513.0000000	260.47526600
Number of Category I veterans (April)	9	1650.1388889	473.4194281	883.0000000	2363.0000000	157.80647602
Number of Category II veterans (April)	9	773.2500000	351.8240860	368.0000000	1367.0000000	117.27469534
Average annual per capita inst. expend.	9	792.4444444	525.0050264	122.0000000	1683.0000000	175.00167548
Total VCIP award	9	71179.3333333	17339.7531845	40568.0000000	96571.0000000	5779.91772817
Non-VCIP funds	9	12088.4600000	18888.2205006	0.0000000	51545.0900000	6296.07350020
VCIP OVA expenditures and obligations	9	59534.0955556	19065.5574900	18926.4400000	84496.2100000	6021.85249666
Non-VCIP OVA expenditures and obligations	9	12088.4600000	18888.2205006	0.0000000	51545.0900000	6296.07350020
Institutional share of award	9	8293.7544444	7706.8838061	0.0000000	23785.3000000	2568.96126872
Total FTE personnel for the OVA	9	5.8300000	2.2014143	2.0000000	10.0000000	0.73380477
Total VCIP funds for the OVA staff	9	40874.1633333	14615.0914475	14227.4800000	64449.7000000	4871.69714916
Total funds for the OVA staff	9	42419.8300000	14244.8622076	14227.4800000	64449.7000000	4748.28740253
Outreach and recruitment	9	1.0000000	0.0000000	1.0000000	1.0000000	0.00000000
Available services	9	1.0000000	0.0000000	1.0000000	1.0000000	0.00000000
Professional assistance	9	1.0000000	0.0000000	1.0000000	1.0000000	0.00000000
Problems and resolutions	9	1.0000000	0.0000000	1.0000000	1.0000000	0.00000000
Coordinators qualifications	9	1.0000000	0.0000000	1.0000000	1.0000000	0.00000000
				CLUSTER L		
Total undergraduate enrollment	13	15281.923077	5651.1853692	6957.0000000	21657.000000	1567.35681660
Undergraduate veterans enrolled	13	3668.153846	969.1360281	1937.0000000	4832.000000	268.78997249
Number of Category I veterans (April)	13	2941.134615	661.1849575	1706.0000000	3880.000000	183.37971284
Number of Category II veterans (April)	13	127.788462	183.9604194	0.0000000	648.000000	51.02144036
Average annual per capita inst. expend.	13	763.230769	267.8747076	469.0000000	1236.000000	74.29507644
Total VCIP award	13	105884.538462	23682.0946730	60392.0000000	135000.000000	6568.23128108
Non-VCIP funds	13	13434.036154	25145.5463141	0.0000000	88012.670000	6974.11973732
VCIP OVA expenditures and obligations	13	92139.491538	24431.7356371	46397.0000000	129591.000000	6776.14427600
Non-VCIP OVA expenditures and obligations	13	13434.036154	25145.5463141	0.0000000	88012.670000	6974.11973732
Institutional share of award	13	11543.042231	11146.4693181	0.0000000	31405.000000	3091.47435898
Total FTE personnel for the OVA	13	7.386154	2.1792106	3.1000000	10.720000	0.60440428
Total VCIP funds for the OVA staff	13	68198.631538	20502.1344882	39752.0000000	108229.210000	5686.26901181
Total funds for the OVA staff	13	72476.246923	22153.9357673	39752.0000000	110647.000000	6144.39625865
Outreach and recruitment	13	1.000000	0.0000000	1.0000000	1.000000	0.00000000
Available services	13	1.000000	0.0000000	1.0000000	1.000000	0.00000000
Professional assistance	13	1.000000	0.0000000	1.0000000	1.000000	0.00000000
Problems and resolutions	13	1.000000	0.0000000	1.0000000	1.000000	0.00000000
Coordinators qualifications	13	1.000000	0.0000000	1.0000000	1.000000	0.00000000

NOTE: All entries and calculations are based on non-weighted data.

Table H.14

MEAN NUMBER OF CATEGORY I VETERANS IN APRIL 1975, OCTOBER 1975, AND FEBRUARY 1976

	Cluster											
	A	B	C	D	E	F	G	H	I	J	K	L
April 1975	394[a] (259)[b]	388 (272)	527 (486)	704 (608)	1171 (917)	785 (528)	1699 (712)	493 (397)	425 (503)	208 (170)	1650 (473)	2941 (661)
October 1975	465 (300)	434 (310)	594 (536)	794 (661)	1277 (1085)	884 (604)	1744 (638)	574 (454)	459 (523)	219 (168)	1874 (490)	3185 (1273)
February 1976	487 (311)	430 (312)	601 (522)	822 (673)	1315 (1141)	859 (607)	1822 (660)	578 (429)	484 (548)	234 (181)	1865 (550)	3185 (729)

NOTE: All entries and calculations are based on non-weighted data.

[a] All entries are rounded to the nearest whole number.

[b] The numbers given in parentheses are the standard deviations for the means presented immediately above.

Table H.15

MEAN NUMBER OF CATEGORY II VETERANS IN APRIL 1975, OCTOBER 1975, AND FEBRUARY 1976

	Cluster											
	A	B	C	D	E	F	G	H	I	J	K	L
April 1975	28[a]	13	48	39	70	73	121	32	35	23	773	128
	(48)[b]	(21)	(80)	(70)	(88)	(89)	(115)	(52)	(63)	(41)	(352)	(184)
October 1975	30	15	51	40	72	88	118	33	29	22	802	117
	(51)	(21)	(80)	(59)	(85)	(129)	(79)	(58)	(61)	(37)	(411)	(121)
February 1976	35	17	58	45	124	100	115	32	35	25	761	134
	(62)	(27)	(88)	(56)	(154)	(152)	(87)	(56)	(74)	(40)	(270)	(146)

NOTE: All entries and calculations are based on non-weighted data.

[a] All entries are rounded to the nearest whole number.

[b] The numbers given in parentheses are the standard deviations for the means presented immediately above.

Table H.16

MEAN VCIP FUNDS FOR EXPENDITURES AND OBLIGATIONS

	Cluster											
	A	B	C	D	E	F	G	H	I	J	K	L
Personal Services	$10,549[a] (6,962)[b]	10,282 (5,844)	14,571 (13,616)	16,990 (13,362)	26,448 (17,182)	20,537 (12,337)	28,749 (14,311)	11,296 (8,885)	11,430 (9,930)	6,207 (3,553)	46,949 (16,120)	76,077 (21,157)
Employee Benefits	1,033 (1,144)	1,186 (1,236)	1,571 (1,805)	1,836 (1,953)	3,015 (2,665)	2,104 (1,848)	3,374 (2,493)	1,237 (1,583)	1,196 (1,948)	483 (702)	5,545 (2,929)	7,638 (4,594)
Workshop Conference	52 (144)	42 (135)	69 (174)	130 (306)	442 (1,064)	141 (331)	244 (422)	34 (94)	135 (456)	37 (103)	190 (445)	641 (760)
Travel	272 (400)	241 (381)	349 (485)	462 (612)	965 (988)	346 (420)	748 (761)	412 (556)	255 (434)	305 (405)	1,433 (527)	875 (853)
Equipment Purchases	154 (308)	168 (325)	203 (627)	385 (860)	935 (1,803)	265 (500)	999 (2,480)	471 (1,539)	324 (833)	264 (546)	1,354 (1,682)	774 (951)
Supplies	282 (354)	309 (470)	422 (615)	1,102 (2,120)	2,465 (3,398)	921 (1,930)	1,187 (1,085)	954 (2,918)	367 (541)	273 (502)	1,435 (1,212)	3,709 (5,150)

NOTE: All entries and calculations are based on non-weighted data.

[a] All entries are rounded to the nearest dollar.

[b] The numbers given in parentheses are the standard deviations for the means presented immediately above.

Table H.17

MEAN NON-VCIP FUNDS FOR EXPENDITURES AND OBLIGATIONS

	Cluster											
	A	B	C	D	E	F	G	H	I	J	K	L
Personal Services	$9,676[a]	5,776	5,044	7,686	20,225	7,656	8,092	6,260	5,277	7,670	6,460	4,875
	(15,265)[b]	(10,347)	(8,574)	(17,223)	(23,851)	(9,841)	(17,059)	(10,261)	(5,674)	(9,374)	(11,191)	(10,244)
Employee Benefits	1,049	358	678	464	2,015	820	797	971	623	715	637	1,841
	(3,040)	(656)	(1,638)	(857)	(3,310)	(1,555)	(1,678)	(1,903)	(1,053)	(1,296)	(1,185)	(3,355)
Workshop/ Conferences	43	19	55	14	13	69	0	19	26	1	78	24
	(164)	(47)	(294)	(51)	(52)	(194)	(0)	(82)	(94)	(4)	(233)	(86)
Travel	425	87	182	23	280	95	0	88	72	199	22	0
	(1,871)	(274)	(582)	(100)	(794)	(188)	(0)	(199)	(205)	(448)	(67)	(0)
Equipment Purchases	27	26	39	15	13	83	0	57	124	27	56	245
	(108)	(86)	(129)	(62)	(52)	(344)	(0)	(254)	(646)	(124)	(167)	(745)
Supplies	521	169	139	60	375	119	1	100	99	139	173	79
	(2,059)	(466)	(328)	(221)	(805)	(256)	(4)	(185)	(183)	(262)	(397)	(214)

NOTE: All entries and calculations are based on non-weighted data.

[a] All entries are rounded to the nearest dollar.

[b] The numbers given in parentheses are the standard deviations for the means presented immediately above.

Table H.18

MEAN TOTAL FUNDS FOR OVA PERSONAL SERVICES

	Cluster											
	A	B	C	D	E	F	G	H	I	J	K	L
OVA Persons	5,871[a] (5,077)[b]	7,608 (5,798)	6,677 (6,002)	7,007 (5,421)	9,255 (8,324)	4,582 (5,713)	10,700 (7,117)	8,671 (5,538)	7,532 (4,720)	3,823 (4,969)	12,955 (5,446)	10,798 (11,055)
Coordinators	3,042 (4,264)	1,603 (3,855)	2,776 (4,728)	3,254 (4,782)	4,140 (5,673)	8,260 (7,018)	3,103 (4,904)	528 (1,672)	1,887 (3,671)	4,328 (4,070)	3,836 (5,632)	9,785 (8,566)
Counselors	3,346 (6,203)	1,757 (6,715)	2,202 (4,519)	3,254 (7,036)	11,850 (18,039)	5,123 (7,923)	4,790 (6,822)	2,802 (4,610)	1,730 (3,696)	1,375 (2,511)	7,613 (8,463)	16,924 (11,770)
Outreach Workers	1,510 (3,719)	365 (822)	766 (1,993)	1,177 (2,376)	4,620 (6,909)	1,176 (2,275)	4,195 (7,494)	758 (2,070)	792 (2,216)	1,001 (2,198)	956 (1,881)	4,499 (5,222)
Recruiters	2,193 (6,861)	585 (1,441)	588 (1,832)	897 (2,811)	3,832 (5,604)	290 (923)	783 (2,348)	719 (1,336)	419 (1,452)	668 (1,986)	2,626 (5,111)	1,809 (4,149)
Secretaries	1,789 (2,607)	2,188 (2,735)	3,705 (4,663)	2,627 (3,237)	5,211 (3,211)	5,179 (4,097)	6,656 (3,447)	2,740 (3,585)	2,148 (2,714)	1,234 (1,606)	7,318 (3,626)	4,777 (4,065)
Clerks	1,176 (3,083)	598 (1,216)	1,566 (3,391)	2,086 (3,458)	4,174 (8,511)	2,626 (5,944)	2,482 (3,662)	1,110 (2,462)	1,293 (3,098)	871 (2,062)	7,063 (5,012)	23,885 (14,198)

NOTE: All entries and calculations are based on non-weighted data.

[a] All entries are rounded to the nearest dollar.

[b] The numbers given in parentheses are the standard deviations for the means presented immediately above.

Table H.19

MEAN FULL-TIME-EQUIVALENT PERSONS STAFFING OVA PERSONAL SERVICES

	Cluster											
	A	B	C	D	E	F	G	H	I	J	K	L
OVA Persons	.65	.83	.61	.70	.67	.42	.78	.87	.84	.43	.89	.54
	(.48)[a]	(.39)	(.49)	(.46)	(.49)	(.50)	(.44)	(.35)	(.37)	(.51)	(.33)	(.52)
Coordinators	.35	.15	.27	.35	.45	.63	.30	.10	.18	.41	.79	.62
	(.45)	(.31)	(.43)	(.52)	(.61)	(.52)	(.43)	(.30)	(.34)	(.45)	(1.64)	(.51)
Counselors	.31	.24	.32	.41	1.60	.46	.80	.46	.17	.17	.86	1.30
	(.54)	(1.05)	(.82)	(.87)	(1.75)	(.82)	(1.53)	(.72)	(.36)	(.32)	(1.00)	(1.14)
Outreach Workers	.37	.04	.20	.26	1.51	.53	.73	.21	.20	.21	.24	.58
	(1.01)	(.11)	(.59)	(.71)	(2.18)	(1.53)	(1.64)	(.42)	(.52)	(.46)	(.49)	(.75)
Recruiters	.22	.06	.09	.08	1.29	.11	.07	.21	.08	.15	.32	.11
	(.58)	(.15)	(.33)	(.27)	(2.18)	(.31)	(.20)	(.38)	(.25)	(.44)	(.56)	(.28)
Secretaries	.34	.33	.57	.45	.88	.35	.97	.46	.36	.16	1.10	.68
	(.49)	(.41)	(.67)	(.51)	(.78)	(.64)	(.53)	(.51)	(.45)	(.22)	(.40)	(.60)
Clerks	.26	.13	.28	.37	.80	.62	.42	.36	.27	.13	1.24	3.56
	(.75)	(.25)	(.59)	(.60)	(1.07)	(1.33)	(.65)	(.78)	(.58)	(.33)	(.80)	(2.11)

NOTE: All entries and calculations are based on non-weighted data.

[a] The numbers given in parentheses are the standard deviations for the means presented immediately above.

Table H.20

Multivariate Profile Analysis Tests for Enrollment Patterns

Significance Test[a]	F	DF Hypothesis	DF Error	P Less Than
Test of Parallelism	6.239	55.000	1734.747	.001
Test of Flatness	131.084	5.000	374.000	.001

	SS	DF	MS	F	P Less Than
Test of Level					
Within Clusters	29360656.000	378	77673.687		
Between Clusters	36378160.000	11	3307105.000	42.577	.001

[a] Tests of significance used Wilks Lambda criterion and canonical correlations.

NOTE: All entries and calculations are based on non-weighted data.

Table H.21

Multivariate Profile Analysis Tests for Expenditure Patterns

Significance Test[a]	F	DF Hypothesis	DF Error	P Less Than
Test of Parallelism	3.938	121.000	2907.166	.001
Test of Flatness	88.400	11.000	368.000	.001

	SS	DF	MS	F	P Less Than
Test of Level					
Within Clusters	1092968704.000	378	2891451.000		
Between Clusters	706582272.000	11	64234752.000	22.215	.001

[a] Tests of significance used Wilks Lambda criterion and canonical correlations.

NOTE: All entries and calculations are based on non-weighted data.

Table H.22

Multivariate Profile Analysis Tests for Staffing Patterns

Significance Test[a]	F	DF Hypothesis	DF Error	P Less Than
Test of Parallelism	3.206	143.000	3118.363	.001
Test of Flatness	133.030	13.000	366.000	.001

	SS	DF	MS	F	P Less Than
Test of Level					
Within Clusters	417048320.000	378	1103302.000		
Between Clusters	271039232.000	11	24639920.000	22.333	.001

[a] Tests of significance used Wilks Lambda criterion and canonical correlations.

NOTE: All entries and calculations are based on non-weighted data.

Table H.23

Large Institutions Reporting Less Than One Full-Time Person to Staff the OVA

Institutional Code	Number of Full-Time[a] OVA Persons	Number of Full-Time Coordinators	Number of Full-Time Counselors	Number of Full-Time Outreach Workers	Number of Full-Time Recruiters	Number of Full-Time Secretaries	Number of Full-Time Clerks	Total Number of Full-Time OVA Staff
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0

[a] Full-time staff as reported on OE Form 269-1 (as reflected on the VCIP data tape and USOE Student Financial Aid Master File).

Table H.24

Small Institutions Reporting Less Than One Full-Time-Equivalent Person to Staff the OVA

Institutional Code	Total FTE OVA Persons[a]	Total FTE Coordinators	Total FTE Counselors	Total FTE Outreach Workers	Total FTE Recruiters	Total FTE Secretaries	Total FTE Clerks	Total FTE OVA Staff
1	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50
2	0.00	0.10	0.60	0.00	0.00	0.27	0.00	0.97
3	0.00	0.10	0.08	0.09	0.29	0.22	0.21	0.99
4	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50

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[a] Full-time-equivalent staff as reported on OE Form 269-1 (as reflected on the VCIP data tape and USOE Student Financial Aid Master File).

Table H.25

Institutions Reporting Less Than 75 Percent of the VCIP Award Used for OVA Expenditures and Obligations

Institutional Code	Percent of Award[a]
1	69.1
2	74.7
3	74.5
4	74.7
5	59.1
6	66.4
7	74.8
8	72.8
9	69.3
10	62.6
11	72.1
12	71.9
13	46.6
14	36.6
15	49.7
16	70.2
17	69.2
18	74.9
19	58.6
20	59.4
21	71.6
22	0.0
23	63.3
24	66.4
25	63.5
26	68.1
27	70.3
28	0.0
29	67.5
30	0.0
31	61.7
32	71.7
33	70.3
34	68.9
35	62.8
36	74.8

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[a] Percent of award was calculated for V56/V27 as reported on the USOE Student Financial Aid Master File.

Table H.26

Institutions Not Reporting Required Services

Institutional Code	Outreach[a] Services	Recruitment[b] Services	Special Education[c] Services	Counseling[d] Services
1	No Service			
2	No Service			
3	No Service		No Service	
4				No Service
5	No Service		No Service	
6	Not Required	No Service	Not Required	No Service
7			No Service	
8	No Service			
9	No Service			
10	No Service			
11				No Service
12	No Service	No Service	No Service	No Service
13	No Service			
14	No Service	No Service	No Service	No Service
15	No Service	No Service	No Service	No Service
16	No Service			
17	No Service			
18			No Service	

[a] Outreach services were defined by any of the following variables abstracted from OE Form 269-2: V109-V126, V128-V132, V134-V144, V300, V313, V347, V355-V361.

[b] Recruitment services were defined by any of the following variables abstracted from OE Form 269-2: V146-V165, V167-V177, V179-V189, V301, V312, V348, V362-V365.

[c] Special Education services were defined by any of the following variables abstracted from OE Form 269-2: V191, V193-V213, V303, V314, V349, V366-V371, $V215 \geq 2$, $V219 \geq 2$, $V220 \geq 2$, $V221 \geq 2$, $2 \leq V222 > 5$.

[d] Counseling services were defined by any of the following variables abstracted from OE Form 269-2: V224-V234, V236, V302, V316, V350, V372-V377, $V238 \geq 2$, $V242 \geq 2$.

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